

## Bilgisayarların Kısa Tarihçesi

Dave Barry'nin köşe yazılarından..., 1996

### Tarih Öncesi Matematik

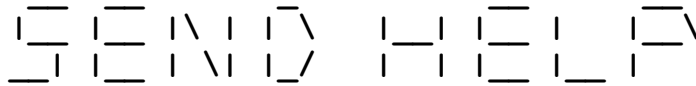
İlk insanların bilgisayara gereksinimi yoktu çünkü sayıları bilmiyorlardı. Aslında bu, anneler için önemli bir sorundu; çocuklarını eğitirken sayıların eksikliğini sık sık hissediyorlardı. "**Çocuklar! Bana bakın! Kesin şunu... Şimdi yanınıza geliyorum haaa... Bak! Şimdi şeye kadar sayacağım... Neydi o?**"

Paleolitik çağa gelindiğinde sayılar keşfedilmişti ama ne işe yaradıkları henüz bilinmiyordu...

İlk önce eski Mısırlılar sayıların toplanıp çıkarıldığında bir işe yaradığını farkettiler... Onların sayesinde matematik keşfedildi; böylece piramitleri inşa etmek ve lig puanlarını tutmak mümkün oldu.

### İlk Bilgisayarlar

Bazı arkeologlar İngiltere'deki Stonehenge kalıntılarının ilk bilgisayar yapma çabalarının sonucu olduğuna inanıyorlar ve bu kalıntılardaki kayaların havadan çekilmiş fotoğraflarında gözlenen şekillerin (aşağıda bir şemasını bulacaksınız) bu savlarının delili olduğunu ileri sürüyorlar:



Yaklaşık aynı yıllarda Çinliler 'abaküs'ü keşfettiler. Tahta çubuklara geçirilmiş boncuklarla çalışan bu aletle son derece hızlı olarak hesap yapabiliyorlardı. Abaküsü



ilk kullanan bakkal müşterisinin satın aldığı bir kilo pirinç için 297 milyon dolar hesap çıkarmıştı. Böylece günümüzün en önemli deyimlerinden bazıları da insanlık tarihindeki yerini aldı :

- Kusura bakmayın, abaküs hatası...
- Kusura bakmayın, henüz program tamamlanmadı...
- Sonra tekrar gelebilir misiniz... Abaküsümüz devre dışı da...

2. Dünya Savaşı'na kadar ABD hükümeti bilgisayarlara pek ilgi göstermedi. Savaş sırasında, düşman ordularının şifreli haberleşmesini çözebilmek için bilgisayar araştırmalarına büyük hız verildi. Hatta, savaşın ilk yıllarında, kod adı "KOD ÇÖZÜCÜ" olan bir makineyle Japon haberleşmesini dinlerken 3 Aralık 1941'de ele geçirilen "E-WAY ILL-WAY ATTACK-AY EARL-PAY ARBOR-HAY - TOKYO" mesajı üzerinde yapılan yoğun çalışmalar sonucunda, 1944 yılında, "Tokyo" sözcüğü "Asya'da bir şehir" olarak çözüldü.

Bilgisayar tarihindeki önemli bir adım da, bu aletlerin ticari hayata girmesiyle atıldı. İlk ticari bilgisayar olarak kabul edilen UNIVAC 1.350 m<sup>2</sup> alana kurulmuştu. Yaklaşık 20.000 elektron tüpüyle çalışan bu makine saniyede 5000 toplama/çıkarma yapabiliyordu ve 40 ton ağırlığındaydı. Bu makinenin bir de 27 tonluk diz üstü modeli bulunmaktaydı. Ofis bilgisayarlarındaki devrim, ofis çalışanlarının daha önce yapamadıkları bir şeyi artık yapabilmeleriyle



birlikte başlamış oluyordu: Bilgisayarla fal açma...

### **Bilgisayar Dünyasının Dili**

Bilgisayar dünyasının, aynı Macarlar gibi, kendine has bir dili vardır. Tek farkla ki, yeteri kadar uzun süre Macarlar arasında yaşarsanız, Macarca'yı sökebilirsiniz. Bilgisayar dünyasının dili, özellikle böyle bir şey olmaması için tasarlanmıştır.

### **Nasıl bir bilgisayar almalı?**

Eğer bilgisayar dünyasında yeniyseniz, bilgisayar satın almanın karmaşık ve uzmanlık gerektiren bir iş olduğunu düşünebilirsiniz. Oysa konunun bir kaç temel ilkesini ve doğru terimleri öğrendikten sonra bilgisayar seçmenin, kol saati parçalarından karanlık bir odada nükleer reaktör yapmaktan daha zor olmadığını görürsünüz.

Bu arada ben size bu konunun sırrını da açıklayıvereyim isterseniz. Yapmak istediğiniz işe ve bütçenize en uygun bilgisayar, siz bilgisayarınızı satın aldıktan 2 gün sonra çlgın bir kampanyayla piyasaya sürülecek olan modeldir.

1980 yılına ait Türkiye Elektrik Kurumu dahili telefon rehberinden :

Nuran Şahsuvaroğlu, Aybiyemci ..... 2334

Uzun yıllar önce, ilk virüsler ortaya çıkmaya başladığı zamanlardı...

Bir hastanede sorunlu bir bilgisayarla uğraşan bir mesai arkadaşımın başında toplanan doktorlar merakla izliyorlardı.

Biraz sonra teşhis kondu... Virüs bulaşmıştı...

*"Peki şimdi n'olacak?" diye soran doktorlara arkadaşım "virüsü temizleyinceye kadar kimse dışarı çıkmayacak" diye bir espriyle yanıt verdi.*

Biraz sonra arka taraftan telefonla evini arayan bir doktorun, büyük olasılıkla eşine *"bu akşam geç gelebilirim; bizim bilgisayara virüs bulaşmış. Bilgisayar odası karantinaya alındı"* dediği duyuldu...



**Y**ıl 1982 falan...  
Mikrobilgisayarlar yeni  
yeni ortaya çıkmaya başlamış...

Büyük bir inşaat şirketine Z80 işlemcili bir bilgisayar kuruyoruz...

O zamanlar bir kaç otomobil fiyatına satın alınmış olan "20. yüzyılın harikası elektronik beyni" görmeye büyük patron geliyor...

İlk tepkisi "*Bu muuu???*" oluyor... "*Tonla parayı buncağiz alete mi verdik?*"

Biraz sonra bilgisayarın boyutlarının önemli olmadığına ikna edilen patron:

*"Peki o zaman... Bu ayın mizanını bir görelim"* diyor.

*"Ama efendim, henüz muhasebe fişleri girilmedi ki?"*

deyince aldığımız yanıt:

*"O-hooooo... Fişleri girdikten sonra mizanı ben de çıkarırım..."*

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ahmet@abc.com.tr



# Computer Humor in English

## who(1) on what(1)



### A customer calls a UNIX consultant

Customer - What is the command that will tell me the revision code of a program?

*UNIX Guru - Yes, that's correct.*

Customer - No, what is it?

*Guru - Yes.*

Customer - So, which is the one?

*Guru - No. "which" is used to find the program.*

Customer - Stop this. Who are you?

*Guru - Use "who am i" not "who r yoo". You can also "finger yoo" to get information about "yoo".*

Customer - All I want to know is what finds the revision code?

*Guru - Use "what".*

Customer - That's what I am trying to find out. Isn't that true?

*Guru - No. "true" gives you "0".*



## who(1) on what(1)



Customer - Which one?

*Guru - "true" gives you "0". "which programname".*

Customer - Let's get back to my problem. What program?  
How do I find it?

*Guru - Type "find / -name it -print" to find "it".  
Type "what program" to get the revision code.*

Customer - I want to find the revision code.

*Guru - You can't "find revisioncode", you must use  
"what program".*

Customer - Which command will do what I need?

*Guru - No. "which command" will find "command".*

Customer - I think I understand. Let me write that.

*Guru - You can "write that" only if "that" is a user on  
your system".*

Customer - Write what?

*Guru - No. "write that". "what program".*

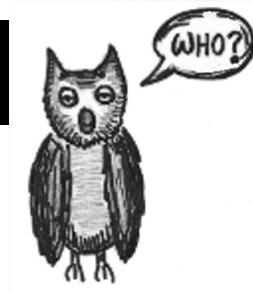
Customer - Cut that out.

*Guru - Yes. Those are valid files for "cut".*





## who(1) on what(1)



Customer - Do you always do this?

*Guru - "du" will give you disk usage.*

Customer - HELP!

*Guru - "help" is only used for Source Code Control System, SCCS in short.*

Customer - You make me angry!

*Guru - No. I don't "make me angry" but I did "make programname" when I was upset once.*

Customer - I don't want to make trouble, so no more...

*Guru - No "more"? "which" will help you find "more". Every system has "more".*

Customer - Nice help! I'm confused more now!

*Guru - Understand that since "help" is such a small program, it is better not to "nice help"; besides "more now" is not allowed but "at now" is; unless of course "now" is a file name.*

Customer - This is almost as confusing as my PC.

*Guru - I didn't know you needed help with "pc". Let me get you to the Pascal compiler team...*

**USER COMMANDS****BABY(1)**

## NAME

BABY - create new process from two parent processes

## SYNOPSIS

BABY [ -sex ] [ -name ]

## DESCRIPTION

BABY is initiated when one parent process polls another server process through a socket connection (BSD) or through pipes in the System V implementation. BABY runs at a low priority for approximately 40 weeks then terminates with heavy system load. Most systems require constant monitoring when BABY reaches its final stages of execution.

Older implementations of BABY required that the initiating process not be present at the time of completion. In these versions the initiating process is awakened and notified of the results upon completion. Modern versions allow both parent processes to be active during the final stages of BABY.

## OPTIONS

-sex

option indicating type of process created.

-name

process identification to be attached to the new process.

## RESULT

Successful execution of the BABY(1) results in new process being created and named. Parent processes then typically broadcast messages to all other processes informing them of their new status in the system.

## BUGS

The SLEEP command may not work on either parent processes for some time afterward, as new BABY processes constantly send interrupts which must be handled by one or more parent.

BABY processes upon being created may frequently dump in /tmp requiring /tmp to be cleaned out frequently by one of the parent processes.

## SEE ALSO

sleep(1) dump(8) cry(3)

## Why Client-Server Computing Is Like Teenage Sex?

*because...*

- a) It's on everyones mind all the time.
- b) Everybody talks about it all the time.
- c) Everybody thinks everybody else is doing it.
- d) Almost no one is really doing it.
- e) The few who are doing it are:
  - f) doing it poorly.
  - g) sure it will be better next time.
  - h) not practicing it safely.
6. Everyone's bragging about their successes, though few have actually had any.



I suppose when it gets to that point, we shan't know how it does it.

*Turing*

If debugging is the process of removing bugs, then programming must be the process of putting them in.

*Dykstra*

## Useful Computer Acronyms and Definitions

**SCSI** - System Can't See It.

**ISDN** - It Still Does Nothing.

**WWW** - World Wide Wait.

**OS/2** - Obsolete Soon, Too.

**OS/2** - Half of an Operating System

**Adapter** - The part you don't have.

**Database** - Space Station for Data.

**Dedicated Server** - Spouse; lover.

**Drag & Drop** - How to dispose of a body.

**Electronics** - Has a cord and a plug or uses batteries.

**Fault** - What isn't yours.

**Logic** - What most people never use.

**Router** - Traffic cop.

**Sysadmin** - Overpaid, underworked Quake addict.

**Tape Backup** - What you do when something taped falls down.



## Useful Computer Acronyms and Definitions

- UPS** - Opposite of go forward.  
Parcel delivery service.
- Character Density** -  
The number of very weird people in the office, divided by the floor space.
- Dump** -  
A system programmer's work area.
- Loop** -  
See loop.
- Disk Crash** -  
A typical computer response to any critical deadline.
- Power User** -  
Anyone who can format a disk from DOS.
- System Update** -  
A quick method of trashing ALL of your current software.
- Obsolete** -  
Any computer you own.
- Diskette** -  
A mobile accessory to transfer and to store errors.
- Errors** -  
The normal result of running a computer system.
- Printer** -  
A device that prints computer errors on paper.
- Hardware** -  
The parts of a computer which can be kicked.



## Useful Computer Acronyms and Definitions

**Null String** - The result of a 4 hour database search.

**PCMCIA** - People Can't Memorize Computer Industry Acronyms.

**APPLE** - Arrogance Produces Profit-Losing Entity.

**IBM** - I Blame Microsoft.

**IBM** - I'll Buy Macintosh.

**IBM** - Incredibly Boring Manuals.

**CDROM** - Consumer Device, Rendered Obsolete in Months.

**MACINTOSH** - Most Applications Crash; If Not, The Operating System Hangs

**Microcomputer** - One millionth of a computer.

**Keyboard** - The standard way to generate computer errors.

**Mouse** - An advanced input device to make computer errors easier to generate.

**Floppy** - The state of your wallet after purchasing a computer.



## Useful Computer Acronyms and Definitions

**Multitasking** - Ability to crash several programs at once.

**User Friendly** - Picture of clouds.

**Command** - A suggestion made to a computer.

**Programming language** - A system of organising and defining error messages.

A Normal Termination.



- ◆ Do files get embarrassed when they get unzipped?
- ◆ Who is General Failure and why is he reading my disk?

The next generation of computers will have a "Warranty Expired" interrupt.



Press any key to continue ...

or...

Smash forehead on keyboard to continue.....

Enter any 11-digit prime number to continue...

Press any key to continue or  
any other key to quit...

Press any key... no, no, no, NOT THAT ONE!



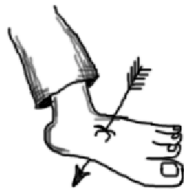
Is reading in the bathroom considered "Multi-tasking"?

**Q. Why do programmers get Halloween and Christmas mixed up?**

*A. Because OCT(31) = DEC(25)*



## How to shoot your foot in various programming languages?



### **C**

You shoot yourself in the foot.

### **C++**

You accidentally create a dozen instances of yourself and shoot them all in the foot.

### **Pascal**

The compiler won't let you shoot yourself in the foot.

### **BASIC**

Shoot yourself in the foot with a water pistol. On large systems, continue until entire lower body is waterlogged.

### **Visual Basic**

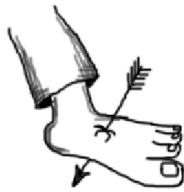
You spend so much time playing with the graphics and windowing system that your boss shoots you in the foot, takes away your PC, and makes you develop in COBOL on a 3270 terminal.

### **FORTRAN**

You shoot yourself in each toe, iteratively, until you run out of toes, then you read in the next foot and repeat. If you run out of bullets, you continue with the attempts to shoot yourself anyway because you have no exception-handling capability.



## How to shoot your foot in various programming languages?



### Assembly

You crash the OS and overwrite the root disk. The system administrator arrives and shoots you in the foot. After a moment of contemplation, the administrator shoots himself in the foot and then hops around the room rapidly shooting at everyone in sight.

### COBOL:

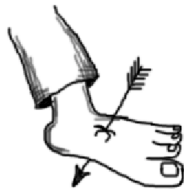
Using a COLT 45 HANDGUN,  
AIM gun at LEG.FOOT, THEN  
place ARM.HAND.FINGER on HANDGUN.  
TRIGGER and SQUEEZE.  
THEN return HANDGUN to  
HOLSTER.  
CHECK whether shoelace needs to be  
retied.

### LISP

You shoot yourself in the appendage which holds the gun with which  
you shoot yourself in the appendage which holds the gun with which  
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you shoot yourself in the appendage which holds the gun with which



## How to shoot your foot in various programming languages?



### **SNOBOL**

If you succeed, shoot yourself in the left foot. If you fail, shoot yourself in the right foot.

### **FORTH**

Foot in yourself shoot.

### **Prolog**

You tell your program that you want to be shot in the foot. The program figures out how to do it, but the syntax doesn't permit it to explain it to you.

### **Ada**

If you are dumb enough to actually use this language, the United States Department of Defense will kidnap you, stand you up in front of a firing squad, and tell the soldiers, "Shoot at his feet."

### **Modula/2**

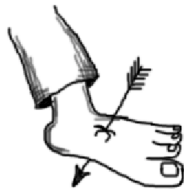
After realizing that you can't actually accomplish anything in the language, you shoot yourself in the head.

### **sh, csh, etc.**

You can't remember the syntax for anything, so you spend five hours reading man pages before giving up. You then shoot the computer and switch to C.



## How to shoot your foot in various programming languages?



### **APL**

You hear a gunshot, and there's a hole in your foot, but you don't remember enough linear algebra to understand what the hell happened.

### **PL/I**

You consume all available system resources, including all the offline bullets. The DataProcessing & Payroll Department doubles its size, triples its budget, acquires four new mainframes, and drops the original one on your foot.

### **SQL**

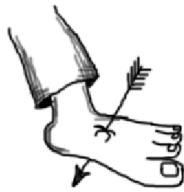
You cut your foot off, send it out to a service bureau and when it returns, it has a hole in it.

### **dBASE**

You buy a gun. Bullets are only available from another company and are promised to work so you buy them. Then you find out that the next version of the gun is the one that is scheduled to shoot bullets.

RAM DISK is not an installation procedure!

## How to shoot your foot in various Operating Systems?



### Unix

You shoot yourself in the foot.

### Unix

```
% ls
foot.c foot.h foot.o toe.c toe.o
% rm * .o
rm:.o no such file or directory
% ls
%
```

### 370 JCL

You send your foot down to MIS and include a 400 page document explaining exactly how you want it to be shot. Three years later, your foot comes back deep-fried

### DOS

You keep running up against the one-bullet barrier.

### MS-Windows

The gun blows up in your hand.

### Windows NT

The gun is so huge and unwieldy that you have to keep swapping it from one hand to the other.

### OS/2

The gun and the bullet aren't speaking to each other any more.

### Mac Finder

It's easy to shoot yourself in the foot: just point and shoot.



## How to shoot your foot in various Operating Systems?



### **AIX**

You can shoot yourself in the foot with either a .38 or a .45.

### **IRIX**

The Terminator shoots you in the foot. A T-Rex bites your other foot.

### **SVR4**

The gun isn't compatible with your foot.

### **Minix**

You learn how to shoot yourself in the foot with a Saturday Night Special.

### **Linux**

Generous programmers from around the world all join forces to help you shoot yourself in the foot for free.

### **VM/CMS**

IBM shoots you in the foot.

### **VMS**

\FOOT\ ambiguous: supply more toes.

### **AMIGA-DOS**

The gun works pretty well, except that few people use one and it's impossible to find bullets.

### **Mach**

The bullets work pretty well, but they don't make guns for it any more.

### **Cray**

You shoot yourself in the foot with an Uzi.

## Computer T-Shirts



**YOU FORTH LIKE IF SMILE THEN ;**

**/dev/teeshirt**

**File system full:  
Write failed on /dev/brain0**

**/dev/earth full:  
Remove anyone you can**

**Kernel Panic:  
The sticky bit is stuck**

**COMPUTER PROGRAMMERS DO IT  
SLOWLY - BIT BY BIT!**

**"finger me; I have a .plan"**

**USER TOO STUPID ERROR!**



**L**ast year a friend of mine upgraded Girlfriend 1.0 to Wife 1.0 and found that it's now a memory hog leaving very little system resources for other applications.

He is only recently noticing that Wife 1.0 also is spawning Child-Processes which are further consuming valuable resources. No mention of this particular phenomena was included in the product brochure or the documentation, though other users have informed him that this is to be expected due to the nature of the application.

Not only that, Wife 1.0 installs itself such that it is always launched at system initialization where it can monitor all other system activity. He's finding that some applications such as PokerNight 10.3, Beerbash 2.5, and Pubnight 7.0 are no longer able to run in the system at all, crashing the system when selected (even though they always worked fine before).

At installation, Wife 1.0 provides no option as to the installation of undesired plugins such as MotherInLaw 55.8 and BrotherInLaw Beta release. Also, system performance seems to diminish with each passing day.







Some features he'd like to see in the upcoming Wife 2.0

- A "Don't remind me again" button.
- A Minimize button.
- An install shield feature that allows Wife 2.0 to be installed with the option to uninstall at any time without the loss of cache and other system resources.
- An option to run the network driver in promiscuous mode which would allow the systems hardware probe feature to be much more useful.

I myself decided to avoid all of the headaches associated with Wife 1.0 by sticking with Girlfriend 2.0. Even here, however, I found many problems. Apparently you cannot install Girlfriend 2.0 on top of Girlfriend 1.0. You must uninstall Girlfriend 1.0 first. Other users say this is a long standing bug which I should have been aware of. Apparently the versions of Girlfriend have conflicts over shared use of the I/O port.

You'd think they would have fixed that stupid bug by now. To make matters worse, the uninstall program for Girlfriend 1.0 doesn't work very well leaving undesirable traces of the application in the system.

Another thing that sucks - all versions of Girlfriend continually popup little annoying messages about the





advantages of upgrading to Wife1.0.

\*\*\*\*\* BUG WARNING \*\*\*\*\*

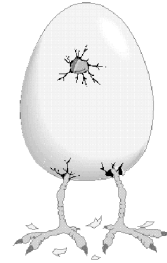
Wife 1.0 has an undocumented bug. If you try to install Mistress 1.1 before uninstalling Wife 1.0, Wife 1.0 will delete MSMoney files before doing the uninstall itself. Then Mistress 1.1 will refuse to install, claiming insufficient system resources.

\*\*\*\*\* BUG WORKAROUNDS \*\*\*\*\*

To avoid the above bug, try installing Mistress 1.1 on a different system and never run any file transfer applications such as Laplink 6.0. Also, beware of similar shareware applications that have been known to carry viruses that may affect Wife 1.0. Another solution would be to run Mistress 1.0 via a Usenet provider under an anonymous name. Here again,

My sister opened a computer store in Hawaii. She sells C shells by the seashore.

## If Operating Systems Were Chickens...



**OS/2 Chicken** It crossed the road in style years ago, but it was so quiet that nobody noticed.

**Win 95 Chicken** You see different colored feathers while it crosses, but cook it and it still tastes like chicken.

**Microsoft Chicken** It's already on both sides of the road.  
**Chicken** And it just bought the road.

**OOP Chicken** It doesn't need to cross the road, it just sends a message.

**Assembler Chicken** First it builds the road ...

**C Chicken** It crosses the road without looking both ways.

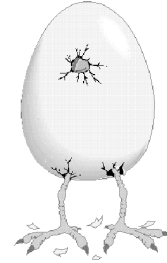
**C++ Chicken** The chicken wouldn't have to cross the road, you'd simply refer to him on the other side.

**VB Chicken** `USHighways!TheRoad.cross(aChicken)`

**Delphi Chicken** The chicken is dragged across the road and dropped on the other side.



## If Operating Systems Were Chickens...



**Java Chicken** If your road needs to be crossed by a chicken, the server will download one to the other side. (Of course, those are chicklets)

**Web Chicken** Jumps out onto the road, turns right, and just keeps on running.

**Mac Chicken** No reasonable chicken owner would want a chicken to cross the road, so

People who deal with bits should expect to get bitten.

*Jon Bentley*



## Cool Internet Host Names

	IP Address <sup>(*)</sup>
www.com	155.229.2.14
robot.asimov.net	209.24.250.190
world.glo.be	206.48.190.18
in.ter.net	194.109.0.136
we.got.net	207.167.88.3
this.net	194.97.204.21
my_name_is_longer_than_yours.mit.edu	18.209.0.30
multiple.org	206.79.254.69
nowhere.com	208.210.190.13
vo.mit.edu	18.247.0.97
dam.mit.edu	18.194.0.21
left.wing.org	131.106.21.1
mayo.nais.com	205.229.212.3
optim.ism.net	205.226.96.50
diplomatic.passport.ca	204.225.103.222
pearly-gates.vatican.com	165.227.223.2
tetrahydrocannabinol.mit.edu	18.238.0.94
my.net	193.78.237.1

(\*) I checked the existence of these names by nslookup; they are really there...

## Cool Internet e-Mail Addresses

howling@themoon.com	206.135.140.52
waiting@busstop.com	205.247.203.67
superman@up.up.and.away.com	198.68.38.144
floyd@dark.side.com	198.68.38.137
right.back@you.com	206.80.4.162

Isn't it odd that all the members of the Association  
for Computing Machinery are human?

If at first you don't succeed, you must be a programmer.

All wiyht. Rho sritched mg kegtops awound?



Once upon a time (  $1/T$  ), Pretty Polly Nomial was strolling across a field of vectors when she came to the boundary of a singularly large matrix. Now Polly was convergent and her mother had made it an absolute condition that she never enter such an array without her brackets on.

Polly, however, who had changed her variables that morning and was feeling particularly badly behaved, ignored this condition on the basis that it was insufficient, and made her way amongst the complex elements. Rows and columns closed in from all sides. Tangents approached her surface. She became tensor and tensor.

Quite suddenly, two branches of a hyperbola touched her at a single point. She oscillated violently, lost all sense of directrix, and went completely divergent. As she reached a turning point, she tripped over a square root that was protruding from the erf and plunged headlong down a steep gradient. When she rounded off once more, she found herself inverted, apparently alone, in a non-Euclidian space.

She was being watched, however. That smooth

---

(\*) : This is a classic! Although it is not related to computers; no hi-tech humor book would be complete without the story of little Polly Nomial...





operator, Curly Pi, was lurking innerproduct. As his eyes devoured her curvilinear coordinates, a singular expression crossed his face. He wondered, was she still convergent? He decided to integrate improperly at once.

Hearing a common fraction behind her, Polly rotated and saw Curly Pi approaching with his power series extrapolated. She could see at once by his degenerate conic and dissipative terms that he was bent on no good.

"Arcsinh," she gasped.

"Ho, ho," he said. "What a symmetric little asymptote you have. I can see your angles have a lot of secs."

"Oh, sir," she protested, "keep away from me. I haven't got my brackets on."

"Calm yourself, My Dear," said our Suave Operator. "Your fears are purely imaginary."

"I, I," she thought, "perhaps he's not normal but homologous."

"What order are you?" the Brute demanded.

"Seventeen," replied Polly.

Curly leered. "I suppose you've never been operated on."

"Of course not," Polly replied quite properly. "I'm







absolutely convergent."

"Come, come," said Curly, "Let's off to a decimal place I know and I'll take you to the limit."

"Never," gasped Polly.

"Abscissa," he swore, using the vilest oath he knew. His patience was gone. Cushing her over the coefficient with a log until she was powerless, Curly removed her discontinuities. He stared at her significant places, and began smoothing out her points of inflection. Poor Polly. The algorithmic method was now her only hope. She felt his hand tending to her asymptotic limit. Her convergence would soon be gone forever.

There was no mercy, for Curly was a heavyside operator. Curly's radius squared itself; Polly's loci quivered. He integrated by parts. He integrated by partial fractions. After he cofactored, he performed rungecutta on her. The complex beast even went all the way around and did a contour integration. Curly went on operating until he had satisfied her hypothesis, then he exponentiated and became completely orthogonal.

When Polly got home that night, her mother noticed that she was no longer piecewise continuous, but had been truncated in several places. But is was too late to





differentiate now. As the months went by, Polly's denominator increased monotonically. Finally, she went to the L'Hopital and generated a small but pathological function which left surds all over the place and drove Polly to deviation.

***The moral of our sad story is this:***

'If you want to keep your expressions convergent, never allow them a single degree of freedom...'

A paperless office has about as much chance as a paperless bathroom.

A woman called the Canon help desk with a problem with her printer. The tech asked if she was "running it under Windows". The woman then responded "*No, my desk is next to the door. But that is a good point; the man sitting in the next cubicle is under a window and his printer is working fine.*"



## A Parable for Graduate Computer Science Students

<Scene>

It's a fine sunny day in the forest, and a rabbit is sitting outside his burrow, tippy-tapping on his typewriter.

Along comes a fox, out for a walk.

Fox: "What are you working on?"

Rabbit: "My thesis."

Fox: "Hmmm. What's it about?"

Rabbit: "Oh, I'm writing about how rabbits eat foxes."

<incredulous pause>

Fox: "That's ridiculous! Any fool knows that rabbits don't eat foxes."

Rabbit: "Sure they do, and I can prove it. Come with me."

They both disappear into the rabbit's burrow. After a few minutes, the rabbit returns, alone, to his





typewriter and resumes typing.

Soon, a wolf comes along and stops to watch the hardworking rabbit.

Wolf: "What's that you're writing?"

Rabbit: "I'm doing a thesis on how rabbits eat wolves."

<loud guffaws>

Wolf: "You don't expect to get such rubbish published, do you?"

Rabbit: "No problem. Do you want to see why?" rabbit and the wolf go into the burrow, and again the rabbit returns by himself, after a few minutes, and goes back to typing.

<Scene>

Inside the rabbit's burrow. In one corner, there is a pile of fox bones. In another corner, a pile of wolf bones. On the other side of the room, a huge lion is belching and picking his teeth.

***Moral of the story :***

- It doesn't matter what you choose for a thesis subject.
- It doesn't matter what you use for data.
- What does matter is who you have for a thesis

## "Hello World" In Various Software Tools



### **abc**

```
WHILE (1=1) :  
  WRITE "Hello World "
```

### **Ada**

```
with Text_Io; use Text_Io;  
procedure hello is  
begin  
  put ("Hello world!");  
end hello;
```

### **Ada windows**

```
with Winuser; use Winuser;  
procedure Hello is  
  I : Integer;  
begin  
  I := MessageBox (0,  
    STRING("Hello World!"),  
    CSTRING(""), MB_OK);  
end Hello;
```





## **ALGOL**

```
BEGIN
FILE F (KIND=REMOTE);
EBCDIC ARRAY E [0:11];
REPLACE E BY "HELLO WORLD!";
WHILE TRUE DO
  BEGIN
    WRITE (F, *, E);
  END;
END.
```

## **APL**

```
'HELLO WORLD'
```

## **Applescript**

```
tell application "Scriptable Text Editor"
  make new window
  activate
  set contents of window 1 to
    "Hello World!" & return
end tell
```



Beware of bugs in the above code; I have only proved it correct, not tried it.



## Assembly Language for the IBM-PC

```
title Hello World Pgm
; This program displays "Hello World"

dosseg
.model small
.stack 100h

.data
hello_message db 'Hello, World!',0dh,0ah,'$'

.code
main proc
    mov ax,@data
    mov ds,ax
    mov ah,9
    mov dx,offset hello_message
    int 21h
    mov ax,4C00h
    int 21h
main endp
end main
```



## MOS6510 assembly on a C=64

```
reset
    LDX #$00
cycle
    LDA hworld,X
    BEQ reset
    STX cache
    JSR $FFD2
    LDX cache
    INX
    JMP cycle
hworld
.text "Hello, World!"
.byte 13,0
cache
.byte 0
```



## awk

```
BEGIN {
    for (;;) {
        printf("Hello World ")
    }
}
```

## Basic

```
10 print"Hello World!"
20 goto 10
```





You had mail, but the root read it, and deleted it!

**C**

```
#include <stdio.h>
main()
{
    for(;;)
    {
        printf ("Hello World!\n");
    }
}
```

**C++**

```
#include <iostream.h>
main()
{
    for(;;)
    {
        cout << "Hello World! ";
    }
}
```



## COBOL

```
IDENTIFICATION DIVISION.  
PROGRAM-ID.      HELLOWORLD.  
DATE-WRITTEN.    02/05/96      21:04.  
                AUTHOR      BRIAN COLLINS  
ENVIRONMENT DIVISION.  
CONFIGURATION SECTION.  
SOURCE-COMPUTER. RM-COBOL.  
OBJECT-COMPUTER. RM-COBOL.  
  
DATA DIVISION.  
FILE SECTION.  
  
PROCEDURE DIVISION.  
  
MAIN-LOGIC SECTION.  
BEGIN.  
    DISPLAY " " LINE 1 POSITION 1 ERASE EOS.  
    DISPLAY "HELLO, WORLD." LINE 15 POSITION 10.  
    STOP RUN.  
MAIN-LOGIC-EXIT.  
EXIT.
```

Computer analyst to programmer: "You start coding. I'll go find out what they want."



**CP/M M80**

```

                                Title "Hello, World!"
;
; Program: HELLOW.MAC
; Author:  Brian K. Durham[bdurham@metronet.com]
; Date:    3-21-96
; Enviroment: M80(MS Macro Assembler) source for CP/
M
;
                                ORG    0100H
Print: LD    HL,10H
                                PUSH   HL
LOOP:
                                LD     DE,MSG
                                LD     C,09H    ; CP/M write string to
console
                                CALL   0005H

                                POP    HL      ; Get loop counter
                                DEC    HL      ; and decrement it

                                PUSH   HL      ; Put back on stack

                                LD     A,L
                                JR     NZ, LOOP ; Loop while not zero

                                POP    HL      ; Clean up stack

                                LD     C,00H    ; CP/M reset call - shut down
                                CALL   0005H

                                HALT           ; This code is never reached

MSG:
TEXT    "Hello, World!"
DB      0Ah
DB      "$"      ; Line terminator
ENDM    Print

```

**Eiffel**

```
class HELLO_WORLD
creation
  make
feature
  make is
  local
    io: BASIC_IO
  do
    !!io
    io.put_string("%N Hello World!!!!")
  end -- make
end -- class HELLO_WORLD
```

...and then the program to run the hello\_world class (hello\_prog.pdl)

```
program hello_prog
root
  HELLO_WORLD: "make"
cluster
  "./"
end
  include "$EIFFEL_S/library/lib.pdl"
end -- hello_prog
```

In case you are interested, this program took (approximately) five minutes to compile and generated an executable of around about 2 Meg in size.

### **forth**

```
: hello
  begin
  true
  while
    ." Hello World "
  repeat
;
hello
```

### **Fortran**



```
c
c Hello, world.
c
    Program Hello

    implicit none
    logical DONE

    DO while (.NOT. DONE)
        write(*,10)
    END DO
10 format('Hello, world.')
END
```

### **HTML**

```
<HTML>
<HEAD>
<TITLE>Hello, World Page!</TITLE>
</HEAD>
<BODY>
Hello, World!
</BODY>
</HTML>
```

### **HyperTalk**

```
on OpenStack
    show message box
    put "Hello World!" into message box
end OpenStack
```

### **Java**

```
class HelloWorld {
    public static void main (String args[]) {
        for (;;) {
            System.out.print("Hello World ");
        }
    }
}
```

### **JavaScript**



```
<TITLE>
Hello World in JavaScript
</TITLE>
<SCRIPT>
    document.write ("Hello, world!")
</SCRIPT>
```

### **LaTeX**

```
\documentclass{article}
\begin{document}
\begin{center}
\Huge{HELLO WORLD}
\end{center}
\end{document}
```

### **Lisp**

```
; LISP
(DEFUN HELLO-WORLD ()
  (PRINT (LIST 'HELLO 'WORLD)))
```

### **Mathematica**

```
While[True, Print["Hello, world!"]]
```

### **Modula-2**

```
MODULE hello;

FROM InOut IMPORT writestring, writeln;

begin
  WriteString("Hello, world!");
  Writeln;
end hello.
```

### **Oberon**



```
(* This is designed to run Under Oberon V4 *)

MODULE Hello;
    IMPORT Oberon, Texts;
    VAR W: Texts.Writer;

    PROCEDURE World*;
    BEGIN
        Texts.WriteString(W, "Hello World!");
        Texts.WriteLine(W);
        Texts.Append(Oberon.Log, W.buf);
    END World;

BEGIN
    Texts.OpenWriter(W);
END Hello.
```

**Pascal**

```
Program Hello (Input, Output);

Begin
    Writeln ('Hello World!');
End.
```

**Perl**

```
print "Hello, World!\n" while (1);
```

**PL/1**

```
HELLO:  PROCEDURE OPTIONS (MAIN);
        /* A PROGRAM TO OUTPUT HELLO WORLD */
        FLAG = 0;
        PUT SKIP DATA('HELLO WORLD!');
END HELLO;
```

**postscript**

```
%!PS
```



```
1.00000 0.99083 scale
/Courier findfont 12 scalefont setfont
0 0 translate
/row 769 def
85 {/col 18 def 6 {col row moveto (Hello
      World)show /col col 90 add def}
repeat /row row 9 sub def} repeat
showpage save restore
```

## Prolog

```
% HELLO WORLD. Works with Sbp (prolog)

hello :-
  printstring("HELLO WORLD!!!!").

printstring([]).
printstring([H|T]) :- put(H), printstring(T).
```

## RPG II

```
H
FSCREEN 0 F 80 80 CRT
C EXCPT
OSCREEN E 1
0 12 'HELLO WORLD!'
```

## Simula

```
Begin
  while 1 = 1 do begin
    outtext ("Hello World!");
    outimage;
  end;
End;
```

## Smalltalk

```
Transcript show:'Hello World';cr
```





## **SNOBOL4 & SPITBOL**

```
        OUTPUT = 'Hello World!'  
END
```

## **tcl**

```
while {1} {  
    puts "Hello World "  
}
```

## **TeX**

```
\font\HW=cmr10 scaled 3000  
\leftline{\HW Hello World}  
\bye
```

## **TI-82** (Graphical Calculator)

```
:OUPUT(1,1,"HELLO WORLD!")
```

## **VRML**

```
#VRML V1.0 ascii  
  
AsciiText {  
    string          "Hello, world !"  
    justification   LEFT  
}
```

