## INDEX

# S.NO CONTENTS

- 1. MICROSOFT WINDOWS MOBILE 6
- 2. ROCK PHISHING
- 3. ZETTA BYTE SYSTEMS (ZFS)
- 4. DOS AND LINUX COMMANDS
- 5. ON LINE FREE COMPUTER BOOKS
- 6. HISTORY OF MICROSOFT
- 7. WRITE IN C ("LET IT BE")
- 8. IF LIFE COULD BE LIKE ACOMPUTER
- 9. GPRS FOR 2.5G GSM AND IS-136
- 10. PUZZLE

#### MICROSOFT WINDOWS MOBILE 6

Latest software to feature new messaging tools, tighter security and improved productivity features; devices to begin shipping world wide by second quarter of 2007.

Windows mobile 6 delivers the ability to view e-mails in their original rich HTML format with live links to web and share point sites, which means text and images are displayed as they would be on a PC, and are available from a corporate e-mail server such as exchange server 2007, from web based accounts such as windows live hotmail or from a myriad of other popular service providers. Windows mobile 6 also includes windows live for windows mobile, which provides customers with a rich set of windows live services.

For example, now through windows live messenger, people can chat with more than one person at a time express themselves through animated figures, quickly send a file or image, or record and send voice notes.

The newest version of the platform offers the most genuine Microsoft office system experience in the mobile versions of office outlook, office word, office excel and office power point by bringing capabilities once available only on the PC versions these products to the small screen. This allows users to neatly view, navigate and edit word documents and excel spread sheets in their original formatting, without affecting tables, images or text, and to view power point presentations on their device.

All windows mobile 6 powered devices include direct push technology for up-todate e-mail delivery and automatic synchronization of outlook calendars, tasks and contacts through Microsoft exchange server. Windows mobile 6 also offers a set of important devices security and management features that include the capability to remotely wipe all data from device should it to be lost or stolen, helping ensure that confidential information remains that way.

#### **INFORMATION MANAGEMENT MADE EASIER:**

Users of the Microsoft office system on the PC of which there are nearly 400 million world wide ? will feel right at home with the new mobile versions of outlook, word, excel and power point available for windows mobile 6 powered devices. Windows mobile 6 addresses extensive user feedback and makes information management easier and more convenient through the following information:

Better-looking e-mail Ease of viewing and editing of office system documents E-mail management and setup with fewer clicks Synchronization with windows vista Smart calendar bar Web search, e-mail, instant messaging (IM) and blogging all together Contacts with context

> Sivagami.P III B.Sc(cs) ?A?.

## ROCK PHISHING

Something?s like spam multiply far too rapidly. The number of phishing websites, the bases that trigger off phishing attacks reached 37,444 in October 2006. According to anti-phishing working group, this was nine times more than a year earlier and a staggering 52 percent more than recorded in September 2006.

This increase is of great concern, given that awareness of spam and spam protective measures is also rising. Apparently, the root cause for this sharp rise in phishing attacks is its new variant-rock phishing a method that circumvents the most commonly deployed anti-phishing security measures.

#### How rock phishing works:

Intelligent browsers are meant to protect users by preventing the opening of known phishing sites. Black lists of phishing sites. The backbone of intelligent browsers is constantly updated by software security companies, which also work to shutdown these fraudulent domains.

Rockphish attack involves a swift change of internet address of a phishing website. This is achieved by using an Internet sub-domain, instead of a domain, as the fraudulent site from where the spam mail generates. Rock phishers thus maintain one web server or domain on which they create several sub-domains, each passing to be the site of the financial institution whose clients are being targeted.

Rock phishers also make use of compromised organizational or home computers, implying that an infected PC is used to generate e-mails that link to the spoof of subdomain or web-page. So when receivers of these e-mails click on the links contained within, they end up on the fraudulent sub-domain of phishing web server.

Since at any point of time, more than one compromised computer is available for the use of rock phishers, it becomes very easy for fraudsters to link several fraudulent subdomains with infected PC?s with Internet connection called botnet or Zombie army, where each infected computer is bot-infected ? is controlled by phishers to send out email transmissions, making the work of security personnel very difficult. If one botnet computer is cleaned, phishers simply use the next infected PC and another sub-domain.

#### A headache for security firms:

The work **?botnet?** originates from **?robot?** net or simply ?bot? net, as each computer becomes a robot in the hands of fraudsters. Apparently, phishers have realized that the wider their networks (botnets), the more durable their rock phishing sites will be and hence, the more damage they will be able to inflict.

A Symantec Internet Security Threat Report mentions that there were 4,696,903 active botnet computers in the first sis months of 2006. In Holland, the police unearthed a 1.5 million node botnet.

Rock phishing thus has proved to be a headache for security firms providing intelligent browsers and browser based anti-phishing toolbars. A single phishing web server can generate hundreds of sub-domain URL?s every day, making the work of updating blacklists very difficult. Since the links are sub-domains and not the main phishing website, tracing the origin of such spam is equally difficult.

Inspite of their limited use, security experts still recommended installing a browserbased anti-phishing toolbar and Internet Firewall, as these protect your computer from falling prey to a botnet. More note worth is their suggestion to not visit a financial or other website from within an e-mail link. Instead, bookmark your most visited financial websites on your browser. And of course, exercise caution when online.

Ishwarya.V

I- BCA ?B?.

## ZETTA BYTE SYSTEMS (ZFS)

Traditional file systems that we know and use today are 64 bit at best. This lets them store a few terabytes of data independently before we need to start thinking about clustering many of them ton address more content. A 128 bit system can store about 1021 bytes. This is first notable point about Sun?s ZFS file system. The theoretical capacity of ZFS is 16 exa bytes per system, other than this; it also has other features that let it be used in mission critical environs.

#### **LOSS PREVENTION:**

Data is susceptible to corruption. File system follows various mechanisms to prevent or minimize this loss. A reason for data loss is that blocks get over written on the disks because file sizes keep changing. In ZFS, this is prevented by writing new data to new locations on the disk and then deleting new information. This way, file expansion is less likely to overwrite adjacent blocks belonging to other files. This principle is actually similar to the WALF file system. Most modern file systems we check sums ordinarily, these are 32 bit check sums. ZFS use 64 bit checksums letting it protect data a little more aggressively. ZFS minimizes performance problems faced by journaling file systems due to excessive writes by grouping write operations into ?transactions blocks? and them treating this group as one.

ZFS takes snap shots in a content sensitive way. Normally, snapshots are copies of the entire file which ends up occupying large sizes as data grows. Sun?s implementation will snap shot only that part of the data that has changed, letting the file system use pointers instead of copies of unchanged information. This way, the disk is also utilized more efficiently.

Solaris 10, the parent OS for ZFS also bundles virtualization technologies. ZFS makes use of this by adding storage virtualization at a very low level. It also removes the necessity for separate volume management for each storage device. This makes ZFS highly scalable. ZFS natively supports mirroring data to other disks in the storage pool. ZFS can correct corrupted data blocks using check sums and retrieving data from locations with the correct data. It is a part of open Solaris.

#### **SHORT COMINGS:**

Two major short comings at the moment are:

1. Cannot mount ZFS volumes under any other OS.

2. Cannot convert between existing UNIX file system and ZFS formats, meaning we need to install from scratch if we want ZFS on the system.

Vandhana.S

II B.Sc (cs) ?A?.

# DOS and Linux Commands

What follows are some common commands used at the MS-DOS prompt in Windows  $9_X$ , and in Linux, as well as a basic example of how the command is used at the Linux shell prompt. Note that these commands usually have a number of options. To learn more about each command, read its associated man page (for example, type man 1s at the shell prompt to read about the 1s command).

Command's Purpose	MS-DOS	Linux	Basic Linux Example		
Copies files	Сору	ср	cp thisfile.txt /home/thisdirectory		
Moves files	Move	mv	mv thisfile.txt /home/thisdirectory		
Lists files	Dir	ls	Ls		
Clears screen	Cls	clear	Clear		
Closes prompt window	Exit	exit	Exit		
Displays or sets date	Date	date	Date		
Deletes files	Del	rm	rm thisfile.txt		
"Echoes" output on the screen	Echo	echo	echo <i>this message</i>		
Edits files with simple text editor	Edit	pico <b>[a]</b>	pico thisfile.txt		

 Table C-1: Similar Commands

Command's Purpose	MS-DOS	Linux	Basic Linux Example		
Compares the contents of files	Fc	diff	diff file1 file2		
Finds a string of text in a file	find	grep	grep this word or phrase thisfile.txt		
Formats a floppy	format a: (if floppy's in A:)	mke2fs <b>(or</b> mformat <b>[b])</b>	/sbin/mke2fs /dev/fd0 (/dev/fd0 is the Linux equivalent of A:)		
Displays command help	command /?	man <mark>[C]</mark>	man command		
Creates a directory	mkdir	mkdir	mkdir <i>directory</i>		
Screens through a file	more	less <b>[d]</b>	less thisfile.txt		
Renames a file	ren	mv	mv thisfile.txt thatfile.txt[e]		
Shows your location in the file system	chdir	pwd	Pwd		
Changes directories with a specified path ( <i>absolute path</i> )	Cd pathname	cd pathname	cd /directory/directory		
Changes directories with a <i>relative path</i>	Cd	cd	cd		
Displays the time	time date		Date		
Shows amount of RAM and use	mem	free	Procinfo		

Notes:

a. Pico is a simple text editor; other editors you can use in place of **pico** include **maces** and **vi**.

b. This formats a disk for the DOS file system.

c. Or you can use info for some commands.

d. You can also another *pager*, called more, to scroll through a file a screen at at time.

e. The mv command serves double-duty, because it can both move a file and, if

you want to rename a file in the same directory, you "move" that file to the same directory with a new name, as in this example.

Gunaseelan.M

III B.Sc(cs) ?A?.

# ON LINE FREE COMPUTER BOOKS

1. Borland C++ builder unleashed:

www.parisan.net/set 1252/pages/books.htm

2. C programming language:

http://book.onairweb.net/computer/pi/c/the-C-programming-language-by-KIRI

3. Client server computing 2<sup>nd</sup> edition:

www.parisan.net/set 1252/pages/books.htm

- Compilers and compiler generators: An introduction with C++ terry & P.D www.oopweb.com
- 5. Crystal reports.net:

www.crystalreportsbook.com/chapters.asp

- 10 Minutes guide to Microsoft exchange 5.0: www.parisan.net/set 1252/pages/books.htm
- 7. C programming Holmes, Steven:

www.oopweb.com

8. 10 Minute guide to Microsoft outlook 97:

www.parasian.net/set 1252/pages/books.htm

9. Building an intranet with windows NT 4.0:

www.emu.edu.tr/english/facilitiesservices/computercenter/books/ib

10. 10 Minutes guide to lotus notes mail 4.5:

www.parasian.net/set 1252/pages/books.htm

Logesh kumar.G

I BCA ?A?.

# HISTORY OF MICROSOFT

In 1983 Microsoft announced its development of Windows, a graphical user interface (GUI) for its own operating system (MS-DOS) that had shipped for IBM PC and compatible computers since 1981. Microsoft modeled the GUI, which was first known as Interface Manager, after that of Apple's Mac OS. Bill Gates had been shown a Macintosh prototype by Steve Jobs early in its development, around 1981, and Microsoft was partnered by Apple to create some of the important early Mac software, such as Word and Excel.

The first independent version of Microsoft Windows, version 1.0, released in 1985, lacked a degree of functionality and achieved little popularity. Windows 1.0 did not provide a complete operating system, but rather extended MS-DOS and shared the latter's inherent flaws and problems. Moreover, the programs that shipped with the early version comprised "toy" applications with little or limited appeal to business users.

### Success with Windows 3.0

Microsoft Windows scored a serious success with Windows 3.0, released in 1990. In addition to improved capabilities given to native applications, Windows also allowed a user to better multitask older MS-DOS based software compared to Windows/386, thanks to the introduction of virtual memory and of loadable VxDs. It made PC compatibles serious competitors to the Apple Macintosh. This benefited from the improved graphics available on PCs by this time (by means of VGA video cards), and the Protected/Enhanced mode which allowed Windows applications to use more memory in a more painless manner than their DOS counterparts could. Windows 3.0 could run in any of Real, Standard or 386 Enhanced modes, and was compatible with any Intel processor from the 8086/8088 upto 80286 & 80386. Windows tried to auto detect which mode to run in, although it could be forced to run in a specific mode using the switches: /r (real), /s (standard) and /3 (386) respectively.

Naveen kumar.A

II B.Sc(cs) ?B?.

# Write in C ("Let it be")

When I find my code in tons of trouble, Friends and colleagues come to me, Speaking words of wisdom: "Write in C."

As the deadline fast approaches, And bugs are all that I can see, Somewhere, someone whispers: "Write in C."

Write in C, Write in C, Write in C, oh, Write in C. Logo?s dead and buried, ?Write in C.?

I used to write a lot of FORTRAN, For science it worked flawlessly. Try using it for Graphics! ?Write in C.?

If you've just spent nearly 30 hours, Debugging some assembly, Soon you will be glad to ?Write in C.?

Write in C, Write in C, Write in C, yeah, Write in C. BASIC's not the answer. ?Write in C.?

Write in C, Write in C Write in C, oh, Write in C. Pascal won't quite cut it. ?Write in C.?

Prakasam.S

II B.Sc(cs) ?B?.

## IF LIFE COULD BE LIKE A COMPUTER

If you messed up your life, you could press "Ctrl, Alt, Delete" and start all over!

To get your daily exercise, just click on "run"! If you needed a break from life, click on suspend.

Hit "any key" to continue life when ready.

To get even with the neighbors, turn up the sound blaster.

To add/remove someone in your life, click settings and control panel.

To improve your appearance, just adjust the display settings.

If life gets too noisy, turn off the speakers.

When you loose your car keys, click on find.

"Help" with the chores is just a click away.

Auto insurance wouldn't be necessary. You would use your diskette to recover from a crash.

And, we could click on "SEND NOW" and a Pizza would be on its way to YOU ...

Karthick.K

### II B.Sc(cs) ?B?.

## GPRS for 2.5G GSM AND IS-136

General Packet Radio Service (GPRS) is a packet-based data network, which is well suited for non-real time Internet usage, including the retrieval of email, faxes and symmetric web browsing, where the user downloads much more data than it uploads on the Internet. Unlike HSCSD, which dedicates circuit switched channels to specific users, GPRS supports multi-ser network sharing of individual radio channels and time slots. Thus, GPRS can support many more users than HSCSD, but in a burst manner. Similar to the Cellular Digital Packet Data (CDPD) standard developed for the North American AMPS systems in the early 1990s, the GPRS standard provides a packet network on dedicated GSM or IS-136 radio channels. GPRS retains the original modulation formats specified in the original 2G TDMA standards, but uses a completely redefined air interface in order to better handle packet data access. GPRS subscriber units are automatically instructed to tune to dedicated GPRS radio channels and particular time slots for ?always on? access to the network.

When all eight time slots of a GSM radio channel are dedicated to GPRS, an individual user is able to achieve as much as 171.2 kbps (eight time slots multiplied by 21.4 kbps of raw encoded data throughput). Applications are required to provide their own error correction schemes as part of the carried data payload in GPRS. As is the case for any packet network, the data throughput experienced by an individual GPRS user decreases substantially as more users attempt to use the network or as propagation conditions become poor for particular users. Just as in the cse of CDPD, implementation of GPRS merely requires the GSM operator to install new routers and Internet gateways at the base station, along with new software the redefines the base station air interface standard for GPRS channels and time slots?no new base station RF hardware is required.

It is worth nothing that GPRS was originally designed to provide a packet data access overlay solely for GSM networks, but at the request of North American IS-136 operators. GPRS was extended to include both TDMA standards. As of late 2001, GPRS has been installed in markets serving over 1000 million subscribers, and is poised to be the most popular near ?term packet data solution for 2G TDMA-based technologies. The

dedicated peak 21.4 kbps per channel data rate specified by GPRS works well with both GSM and IS-136 and has successfully been implemented.

Raghumaran.M

III B.Sc(cs) ?A?.

# PUZZLE

1			2	3
	4	11		
		5		
		6		
7				
8			9	
				10

### <u>QUESTIONS</u>

### Left to right:

- 1-> in an operation synchronous counter is used to achieve this. (5)
- 7-> Small picture on desktop. (4)
- 8-> A semiconductor circuit on a single silicon die. (4)

### **Right to left:**

- 4-> connection of computers <not to catch fish> (3)
- $5 \rightarrow$  to address the website abbreviation. (3)
- 6-> current tracer is used to locate the exact position of this (5)
- 9-> remark of basic programmers (3)
- 10-> the number of states through which a counter can be progressed are (7).

#### **Top to bottom:**

2-> blinking vertical line. (6)
3-> sequence of instructions. (7)
11-> the component used to carry the signal <not the passenger> (3)
1-> a memory capable of storing data indefinitely (6)

### <u>ANSWERS</u>

Left to right: 1->SPEED 7->ICON 8->CHIP Right to left: 4->NET 5->URL 6-.SHORT 9->REM 10->MODULUS Top to bottom: 2->CURSOR 3->PROGRAM 11->BUS 1->STATIC

Ramya.B

I B.Sc (cs) ?A?.