Network and Internet

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A **computer network**, often simply referred to as a network, is a collection of computers and devices interconnected by communications channels that facilitate communications among users and allows users to share resources. Networks may be classified according to a wide variety of characteristics. A computer network allows sharing of resources and information among interconnected devices. There are three types of Network:

1. **LAN**-Local Area of Network: A local area network (LAN) is a network that connects computers and devices in a limited geographical area such as home, school, computer laboratory, office building, or closely positioned group of buildings

2. **MAN-** Metropolitan Area of Network: **metropolitan area network** (**MAN**) is a large computer network that usually spans a city or a large campus. A MAN usually interconnects a number of local area networks (LANs) using a high-capacity backbone technology, such as fiber-optical links, and provides up-link services to wide area networks (or WAN) and the Internet.

   A Metropolitan Area Network (MAN) is a large computer network that spans a metropolitan area or campus. Its geographic scope falls between a WAN and LAN. MANs provide Internet connectivity for LANs in a metropolitan region, and connect them to wider area networks like the Internet.

3. **WAN**- Wide Area of Network for e.g Internet: A wide area network (WAN) is a computer network that covers a large geographic area such as a city, country, or spans even intercontinental distances, using a communications channel that combines many types of media such as telephone lines, cables, and air waves.

Internet:

Internet consists of hundreds of thousands of local computer networks interconnecting dozens or sometimes hundreds of computers each. They have all been interconnected with a gigantic web of cables and satellite links spanning the Globe. Thus Internet is the network of networks, interconnecting small local and regional nets into a worldwide web.

History of the Internet and Related Networks

Introduction

In 1973, the U.S. Defense Advanced Research Projects Agency (DARPA) initiated a research program to investigate techniques and technologies for interlinking packet

networks of various kinds. The objective was to develop communication protocols, which would allow networked computers to communicate transparently across multiple, linked packet networks. This was called the Internetting project and the system of networks, which emerged from the research, was known as the "Internet." The system of protocols which was developed over the course of this research effort became known as the TCP/IP Protocol Suite, after the two initial protocols developed: Transmission Control Protocol (TCP) and Internet Protocol (IP).

In 1986, the U.S. National Science Foundation (NSF) initiated the development of the NSFNET which, today, provides a major backbone communication service for the Internet. With its 45 megabit per second facilities, the NSFNET carries on the order of 12 billion packets per month between the networks it links. The National Aeronautics and Space Administration (NASA) and the U.S. Department of Energy contributed additional backbone facilities in the form of the NSINET and ESNET respectively. In Europe, major international backbones such as NORDUNET and others provide connectivity to over one hundred thousand computers on a large number of networks. Commercial network providers in the U.S. and Europe are beginning to offer Internet backbone and access support on a competitive basis to any interested parties.

Various consortium networks provide "Regional" support for the Internet and "local" support is provided through each of the research and educational institutions. Within the United States, much of this support has come from the federal and state governments, but a considerable contribution has been made by industry. In Europe and elsewhere, support arises from cooperative international efforts and through national research organizations. During the course of its evolution, particularly after 1989, the Internet system began to integrate support for other protocol suites into its basic networking fabric. The present emphasis in the system is on multiprotocol networking, and in particular, with the integration of the Open Systems Interconnection (OSI) protocols into the architecture.

Both public domain and commercial implementations of the roughly 100 protocols of TCP/IP protocol suite became available in the 1980's. During the early 1990's, OSI protocol implementations also became available and, by the end of 1991, the Internet has grown to include some 5,000 networks in over three dozen countries, serving over 700,000 host computers used by over 4,000,000 people.

A great deal of support for the Internet community has come from the U.S. Federal Government, since the Internet was originally part of a federally-funded research program and, subsequently, has become a major part of the U.S. research infrastructure. During the late 1980's, however, the population of Internet users and network constituents expanded internationally and began to include commercial facilities. Indeed, the bulk of the system today is made up of private networking facilities in educational and research institutions, businesses and in government organizations across the globe.

The Coordinating Committee for Intercontinental Networks (CCIRN), which was organized by the U.S. Federal Networking Council (FNC) and the European Roseau Associates pour la Recherché Europeans (RARE), plays an important role in the coordination of plans for government- sponsored research networking.

CCIRN efforts have been a stimulus for the support of international cooperation in the Internet environment.

What is required for Internet

The following items are to be required for Internet to setup dial up connection

1. **PC –** Personal computer with windows operating system
2. **Local Telephone connection-** Where you can dial from which you have taken Internet connection.
3. **Modem -** Is used for converting signal since telephone is based on analog signal and computer is accepting digital signal Modem is converting analog signal to Digital and Digital to analog.
4. **Broadband Internet connection -** From Internet Service Provider for example; BSNL, Reliance, TATA, and Airtel these are Internet service providers. They have given Broadband Internet connection.
5. **Internet Explorer Web browser**

Internet Explorer makes it easier to get the most from the World Wide Web, whether you are searching for new information or browsing your favorite Web sites. And built-in IntelliSense technology can save you time completing routine Web tasks, such as automatically completing Web addresses and forms for you, and automatically detecting your network and connection status.

The easiest way to get around the Web

- When you start typing a frequently used Web address in the Address bar, a list of similar addresses appears that you can choose from. And if a Web-page address is wrong, Internet Explorer can search for similar addresses to try to find a match.
- Search for Web sites by clicking the **Search** button on the toolbar. Then in the Search bar, type a word or phrase that describes what you're looking for. When your search results appear, you can view the individual Web pages without losing your list of search results.
- You can also search directly from the Address bar. Just type common names or words, and Internet Explorer can automatically take you to the site that most likely matches what you are searching for, and list other likely sites as well.
- Go to other Web pages similar to the one you are viewing, without even doing a search. Just use the Show Related Sites feature.
- Once you're on a Web page, Internet Explorer can help you complete entries in any kind of Web-based form. Start typing, and a list of similar entries appears that you can choose from.
- Browse through a list of Web pages you recently visited by clicking the **History** button on the toolbar. In addition you can rearrange or search the History list.

How to Open Web site on Internet:

After connect your computer with Internet, double click on Internet Explorer and type the web address in address bar and press enter key. You will see the desired information for example.

After the page has been opened you can moving the mouse pointer over the item. If the pointer changes to a hand, the item is a link. A link can be a picture, a 3-D image, or colored text (usually underlined To start browsing the Web, click any link on your home page, which is the page that appears when you start Internet Explorer. You can see whether an item on a page is a link by).

Now you're ready to find a Web site on your own.

To save a Web page on your computer

1. On the **File** menu, click **Save As**.
2. Double-click the folder you want to save the page in.
3. In the **File name** box, type a name for the page.
4. In the **Save as type** box, select a file type.

To save all of the files needed to display this page, including graphics, frames, and style sheets, click **Web Page, complete**. This option saves

each file in its original format but hyperlink will be open when your computer is connected on Internet

To save a Pictures and Image

1. select the image or picture and right click on mouse then select save as picture.
2. Double-click the folder you want to save the picture in.
3. In the **File name** box, type a name for the picture file and click ok.

To print a Web page

1. On the **File** menu, click **Print**.
2. Set the printing options you want.

Some important web sites are:

1. Important news paper website

http://www.jagran.com

http://www.hindustantimes.com

http://www.thetimesofindia.com

http://www.bhaskar.com

2. Haryana Govt. website: http://haryana.gov.in

3. Govt. of India web sites: http://goidirectory.gov.in

4. Supreme court of India http://supremecourtofindia.nic.in

5. High court Chandigarh http://highcourtchd.gov.in

6. Indian courts http://www.indiancourts.nic.in/sitesmain.htm

7. **AG**, **Haryana**, State Government of Haryana http://aghry.gov.in/

8. Searching any web site address using this: http://www.google.co.in

Search engine:

Suppose you want to search some information on Internet but you did; not know web address. You can use one of them to search the web address on the Internet
For example:

1. www.google.com

Type the text which you want to search on the Internet and click on Google Search
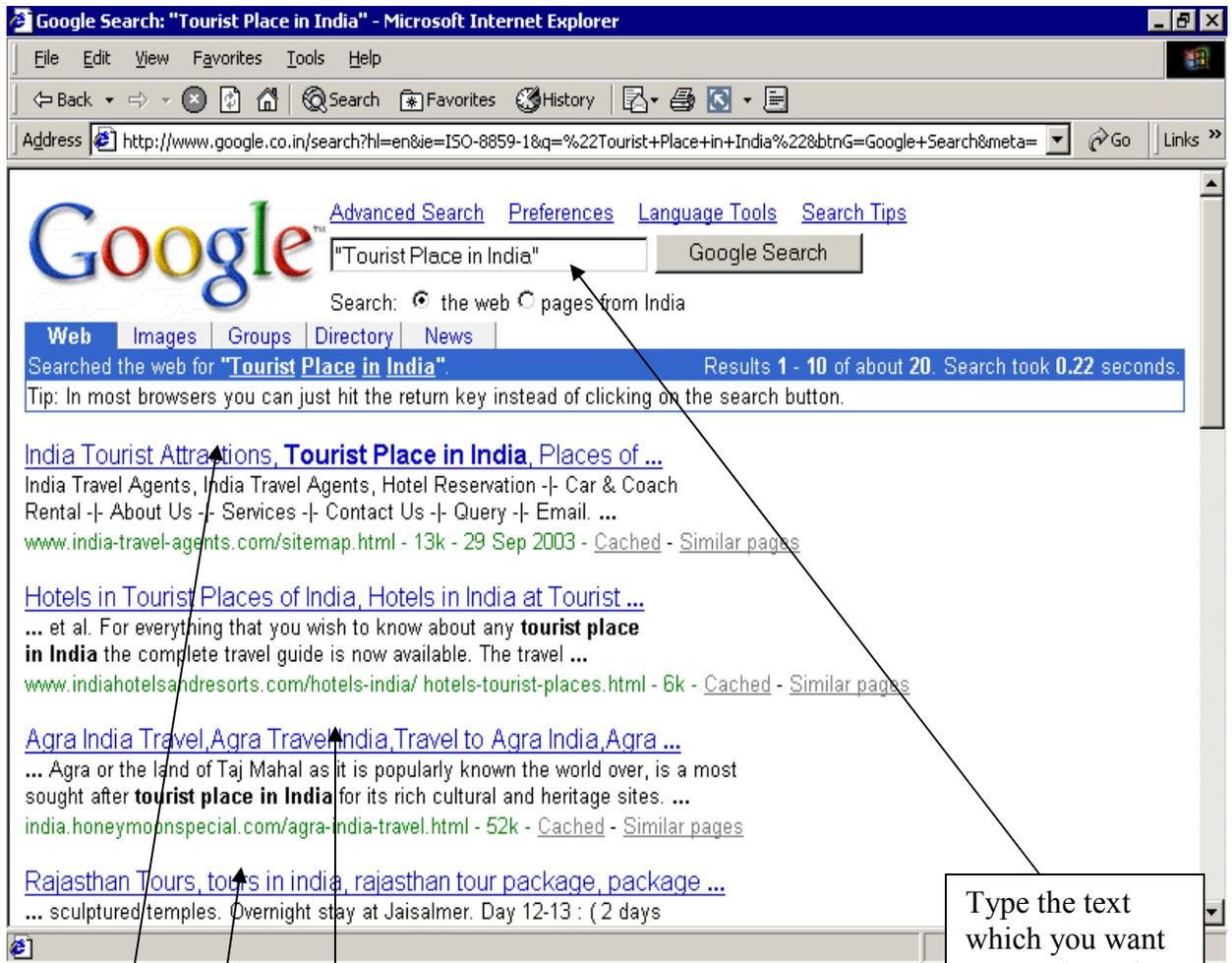
Click on blue underline to see the detail information .after clicking ,the web address will automatically show on address bar

2. www.yahoo.com

3. www.altavista.com : Similarly you can use www.altavista.com to search the web address on the Internet

How to download file from Internet

There is some free web site on the Internet where you can download some free trial software for example.www.download.com

Step 1

Step 2:

Click
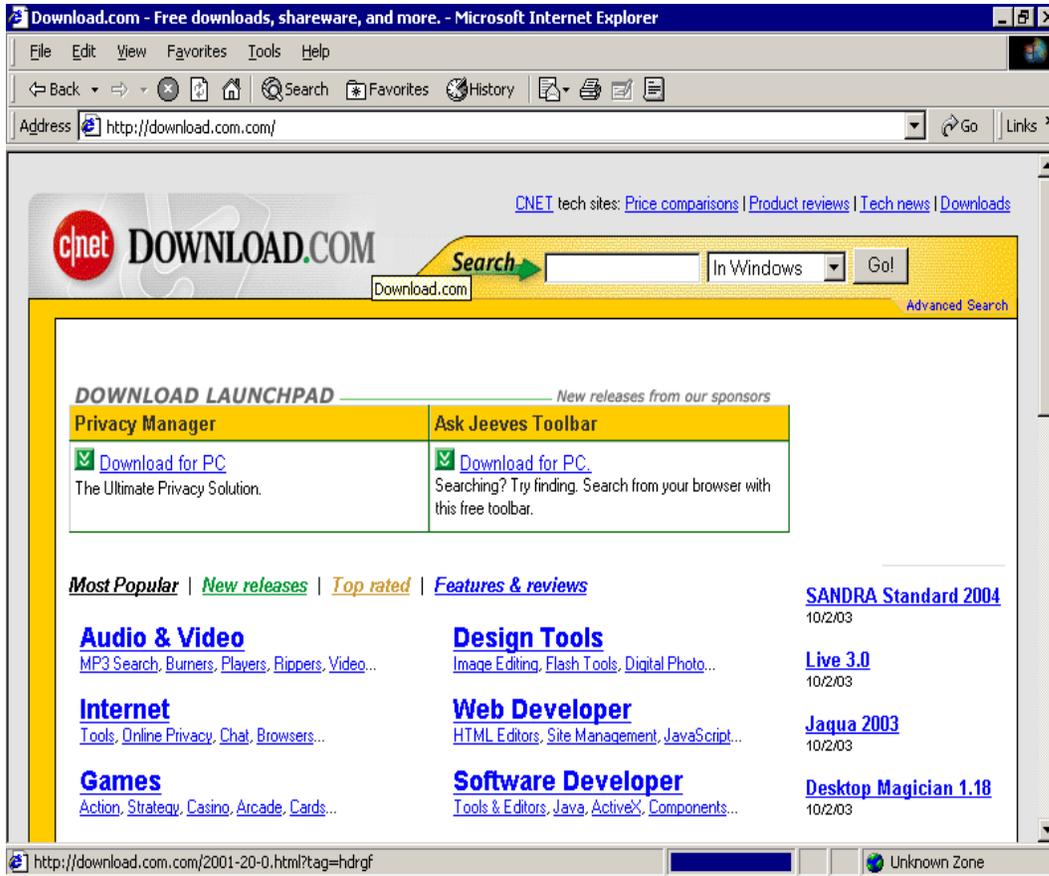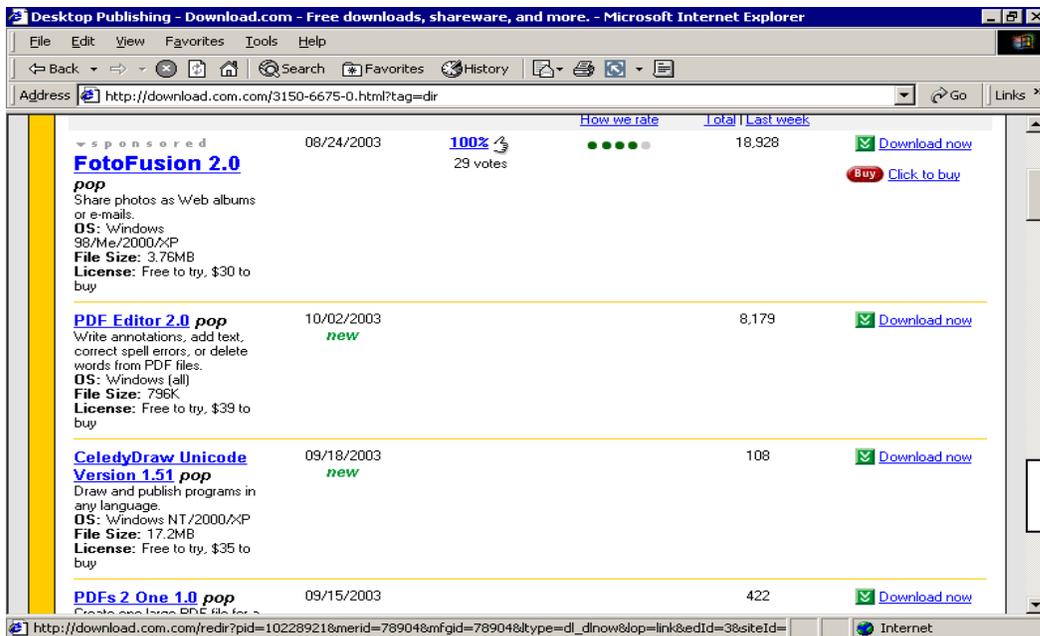
Step 3: After performing step 2 the following screen appears below.

File Download

You have chosen to download a file from this location.

pdfedit!.exe from www.cad-kas.com

What would you like to do with this file?

○ Run this program from its current location
● Save this program to disk

☑ Always ask before opening this type of file

ok

OK   Cancel   More Info
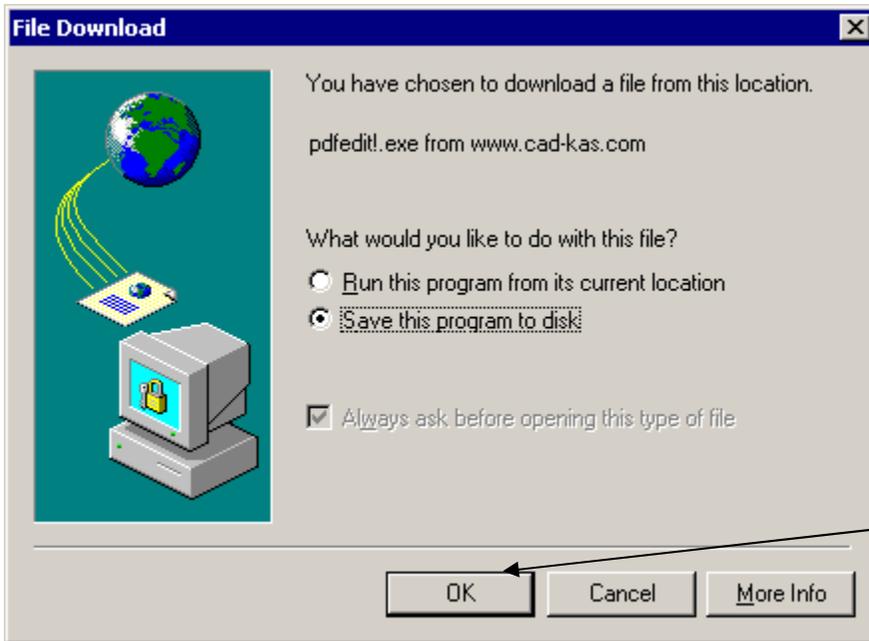
Step 4 :

After performing step 3 the following screen appears below.

Choose folder where you want to save file

Save As

Save in: Desktop

History

Desktop

My Documents

My Computer

My Network P...

My Documents
My Computer
My Network Places
HP PrecisionScan Pro 3.02
AVG 6.0
avg6518fu_free
MyPhotos Assistant by Webshots
websamp
Webshots Desktop!

Stores and manages documents

File name: pdfedit!   Save   click

Save as type: Application   Cancel
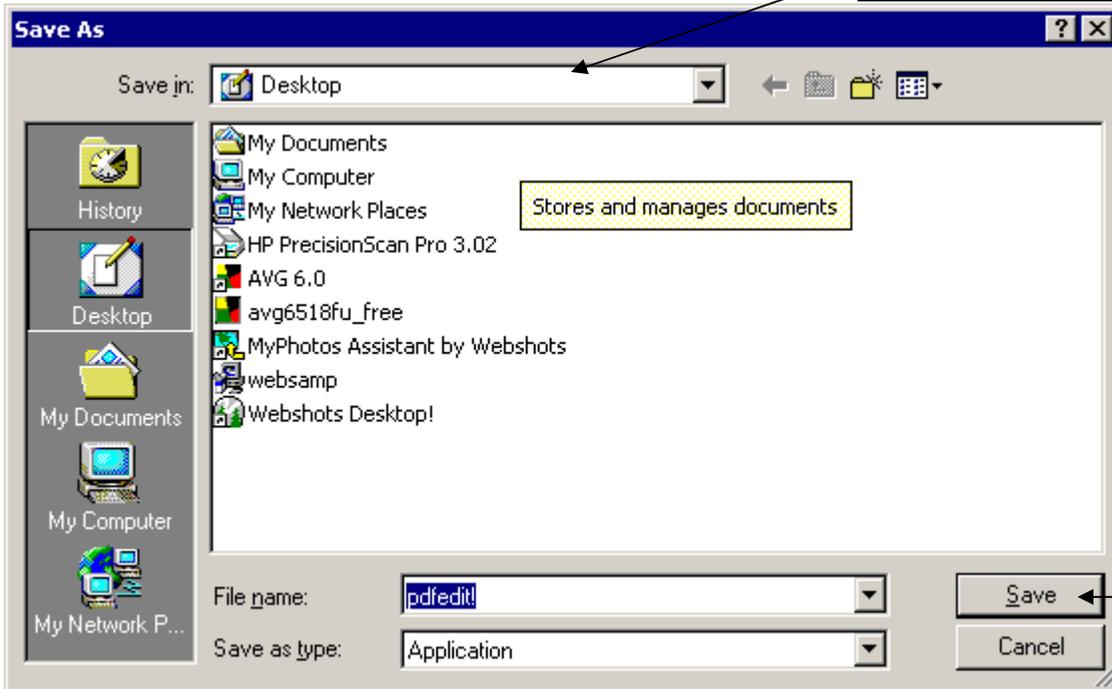
Step 5: After performing step 4 the following screen appears below. The file start-downloading, wait till the downloading complete.

9% of pdfedit!.exe Completed

Saving:
pdfedit!.exe from www.cad-kas.com

Estimated time left: 1 min 5 sec (68.1 KB of 796 KB copied)
Download to: C:\Documents and Settin...\pdfedit!.exe
Transfer rate: 11.1 KB/Sec

☑ Close this dialog box when download completes

[Open] [Open Folder] [Cancel]
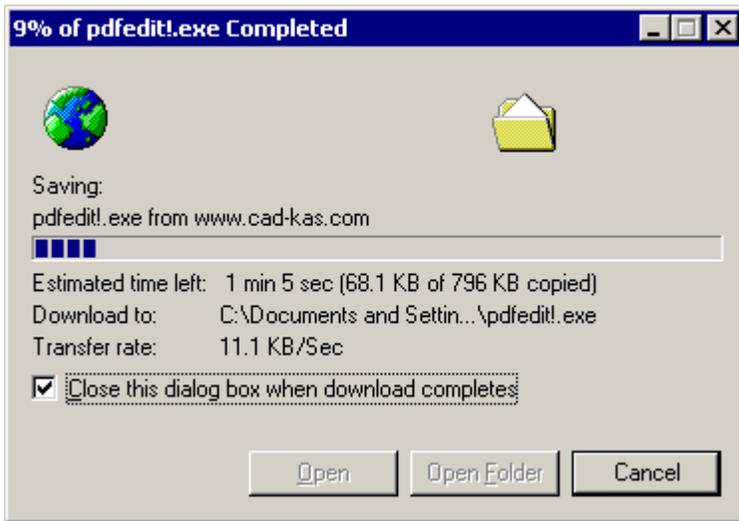
Step 6:

After performing step 5 the following screen appears below.

Download complete

Download Complete

Saved:
pdfedit!.exe from www.cad-kas.com

Downloaded: 796 KB in 1 min 54 sec
Download to: C:\Documents and Settin...\pdfedit!.exe
Transfer rate: 6.98 KB/Sec

☐ Close this dialog box when download completes

[Open] [Open Folder] [Close]
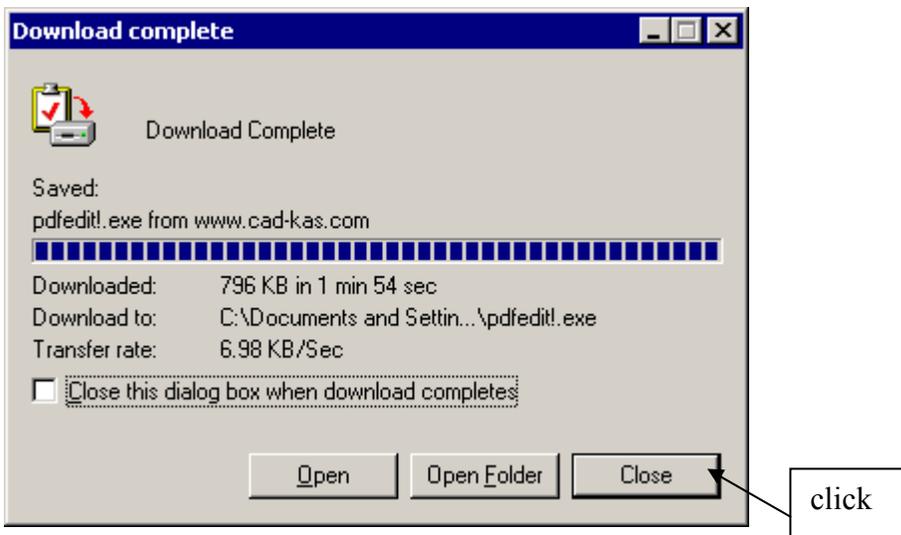
click

After downloading is complete click close button . File is save on the folder when you can choose in step 4. Double click on download file the software will be installed in your computer.

Internet E-mail:

Electronic mail or email is the most useful application of the Internet. Some web site, which can provide free email service on the Internet. These are

1. http://www.rediffmail.com

2. http://mail.yahoo.com

3. http://www.indiatimes.com

4. http://www.hotmail.com

5. http://www.gmail.com

To access e-mail you can create e-mail address on any one of the web site. For example.

Creating New Account on www.rediffmail.com

Step 1: Connect your computer with Internet and double click on Internet Explorer icon on desktop

Step 2: Type the web site address on address bar. For e.g. www.rediffmail.com and press enter key

Step 3 : The web site will be open as seen below. For new user click on sign up
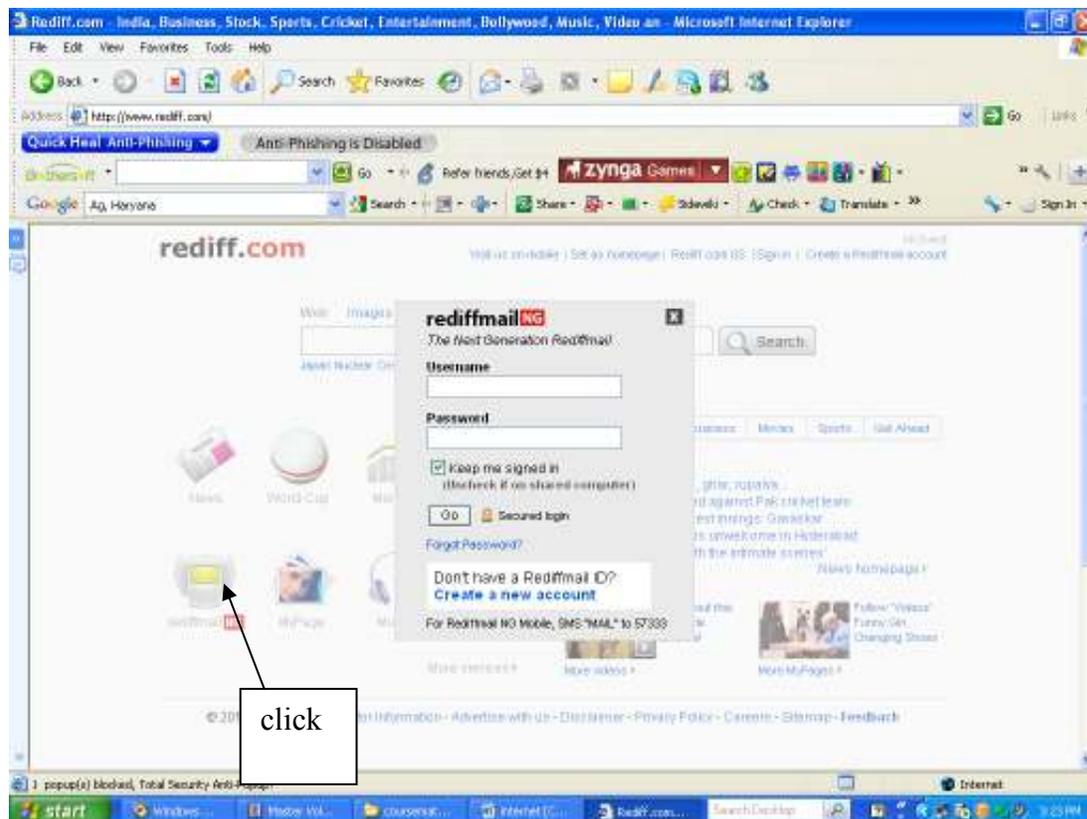
Step 4: After opening the website click on sign up for new user. The following screen appears below. Choose free sign up now rest is paid e-mail web sites.

click

step 6: Fill the second portion of the form.

File   Edit   View   Favorites   Tools   Help

Back → | Search Favorites History | Address http://login.rediff.com/cgi-bin/register.cgi Go Links »

☐ Automobiles   ☐ Science & Technology
☐ Business News/Information   ☐ Fashion
☐ Careers/Jobs   ☐ Internet Services
☐ Cooking   ☐ Special Offers
☐ Electronics   ☐ News
☐ Home & Family   ☐ Art/Design
☐ Government Policies   ☐ Others

Confirm Registration

As a last step to register for Rediffmail, enter the number as it is shown in the box below. 99464

9 9 4 6 4

I agree to the terms and conditions and have read and understood the privacy policy.

Register Me   Reset

Help?

click

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Done   Internet

File   Edit   View   Favorites   Tools   Help

Back → | Search Favorites History | Address http://login.rediff.com/cgi-bin/register.cgi Go Links »

Thank You for Registering with Rediffmail,
the Fastest, Safest and Easiest way to mailing

Welcome to Rediffmail!
Now get mail on your mobile. FREE!

To login to your Inbox from anywhere, anytime,
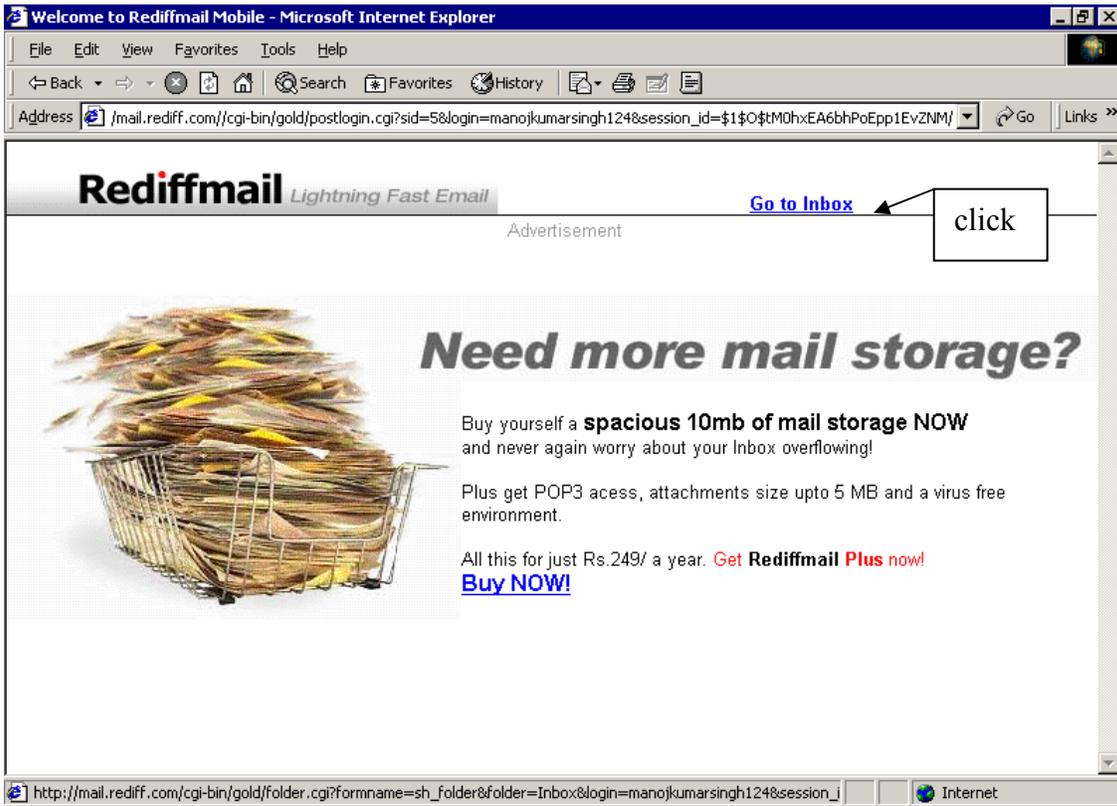SMS IN username password to **7333** (for eg: **IN kumarper 456t**)
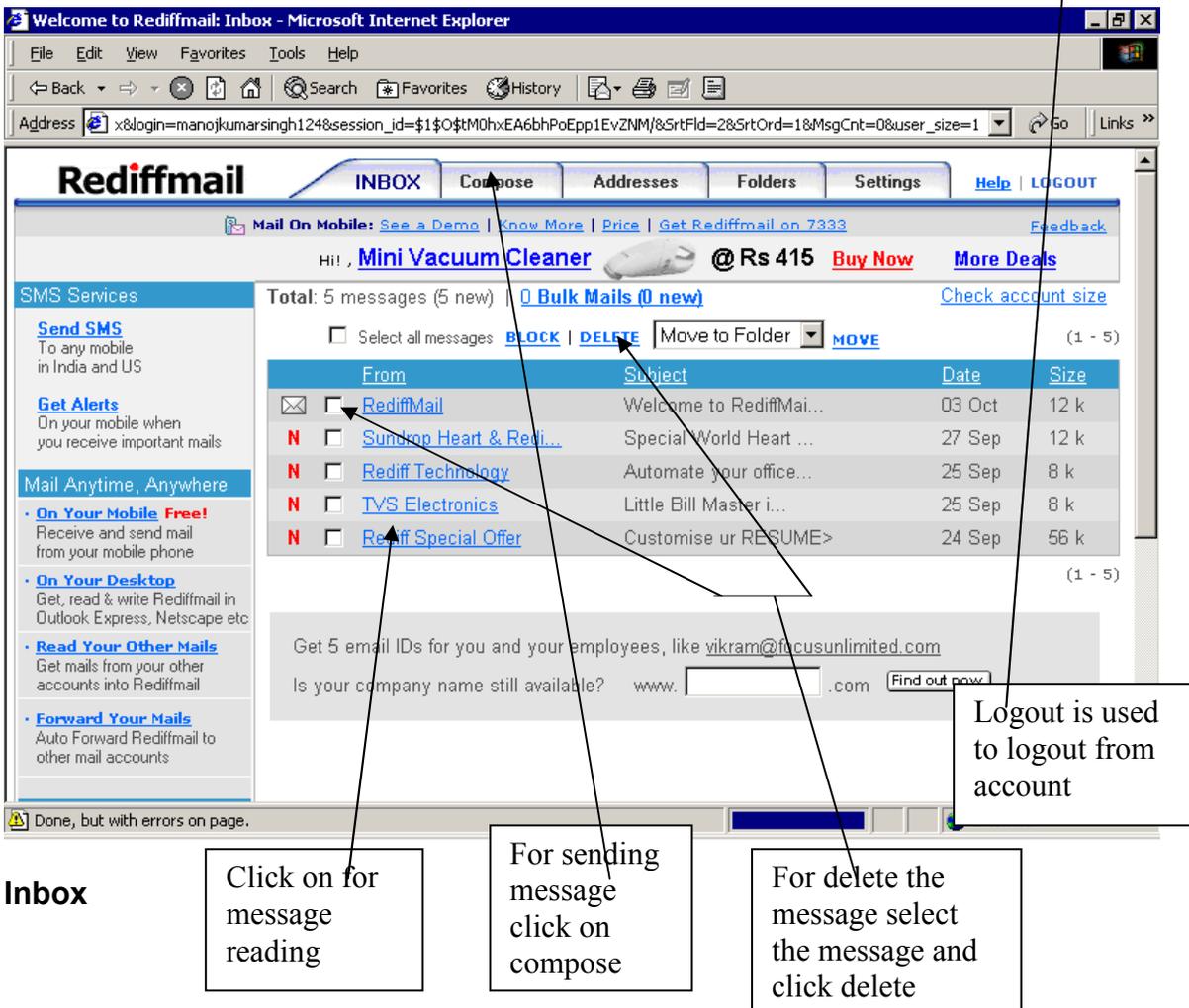
OR

Just enter your mobile number here NOW!

GO

Try it now and get your welcome message on your mobile!
It's FREE!

◄◄ Skip and Go to My Inbox

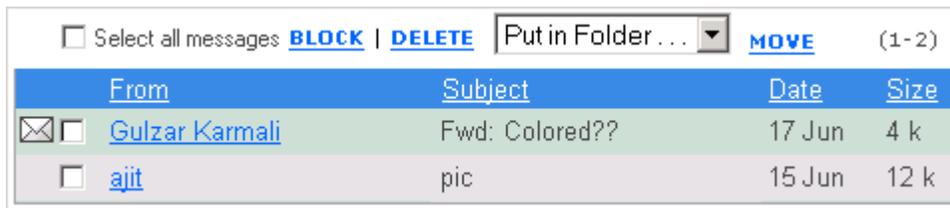Done   Internet

100

Step 7: After clicking to **Go to Inbox** your e-mail account is created.

Inbox

Click on for message reading

For sending message click on compose

For delete the message select the message and click delete

Logout is used to logout from account

The Inbox is the place where all your new messages are stored. When you login, you will see how many messages you have in your Inbox and how many of them are new.

Your email messages are displayed one below the other, with the latest message first. Each new mail is shown with a symbol next to it depending on the type of mail it is.

⊠ = New Email

N = New Newsletter

Also shown is the sender of the message, the subject, the date it was sent and the size of the message.

Reading your mail

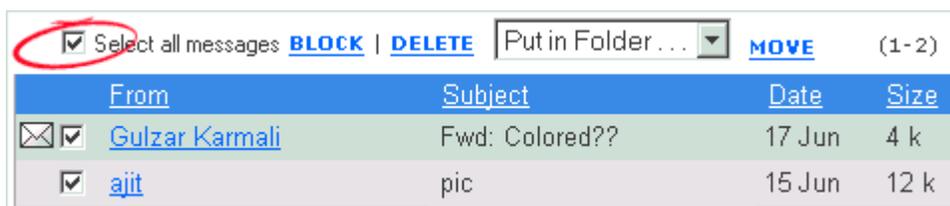Click the sender's name to read that particular message.

Sorting your mail

You can sort your mail in your inbox.

1. To sort your mail by Sender, click on the coloumn header Sender
2. To sort your mail by Subject click on the coloumn header Subject
3. To sort your mail by Date click on the coloumn header Date
4. To sort your mail by Size click on the coloumn header Size

Selecting mail

1. To select a message you wish to delete, move or block, you need to click in the box next to the message.
2. Select multiple messages by clicking in the boxes next to the messages.
3. If you wish to select all messages, click in the box next to Select all messages.

Deleting your mail

You can delete the mail messages that you do not wish to keep. All deleted messages are moved to the Trash folder. They will be deleted permanently from

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the Trash folder within 24 hours.

To delete your mail messages

1. Click in the box(es) next to the message(s) you would like to delete.
2. Click on "Delete" at the top of the page.
3. The selected message(s) will be deleted.
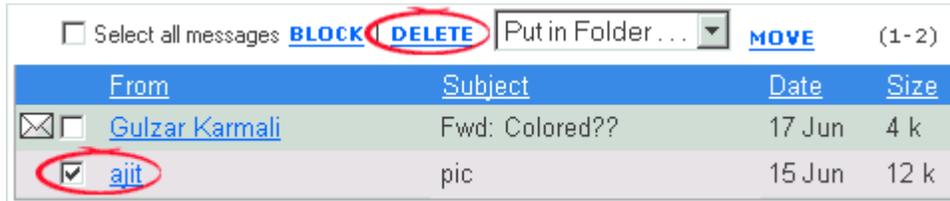
Blocking a sender

To reduce unwanted e-mail, you can block senders from whom you don't want to receive mail. To make changes to your Blocked sender list, go to Settings and click Block Sender. Remove a person from your blocked sender list to resume getting mail from him/her To block sender(s)

1. Click in the box(es) next to the address(es) you want to block.
2. Click on "Block Sender" at the top of the page.
3. The selected address(es) will be blocked.

Moving your mail

You can move your mail messages to other folders that you create. This will help you organize your mails better. To move a mail message(s)

1. Click in the box(es) next to the message(s) you would like to move.
2. Choose the folder you'd like to move the messages to, from the drop down list of folders at the top of the page.
3. Click the "Move" button to move the selected messages to the chosen folder.
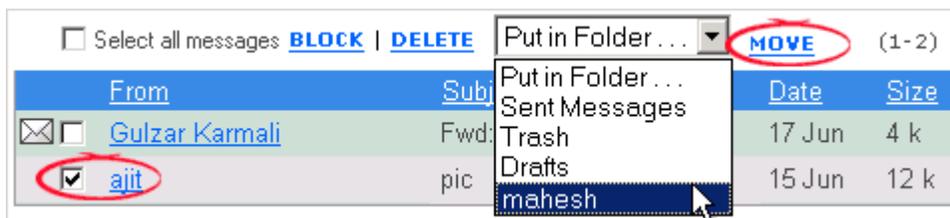
Send Message with attachment:

Step 1: Connect your computer with Internet and double click on Internet Explorer icon on desktop
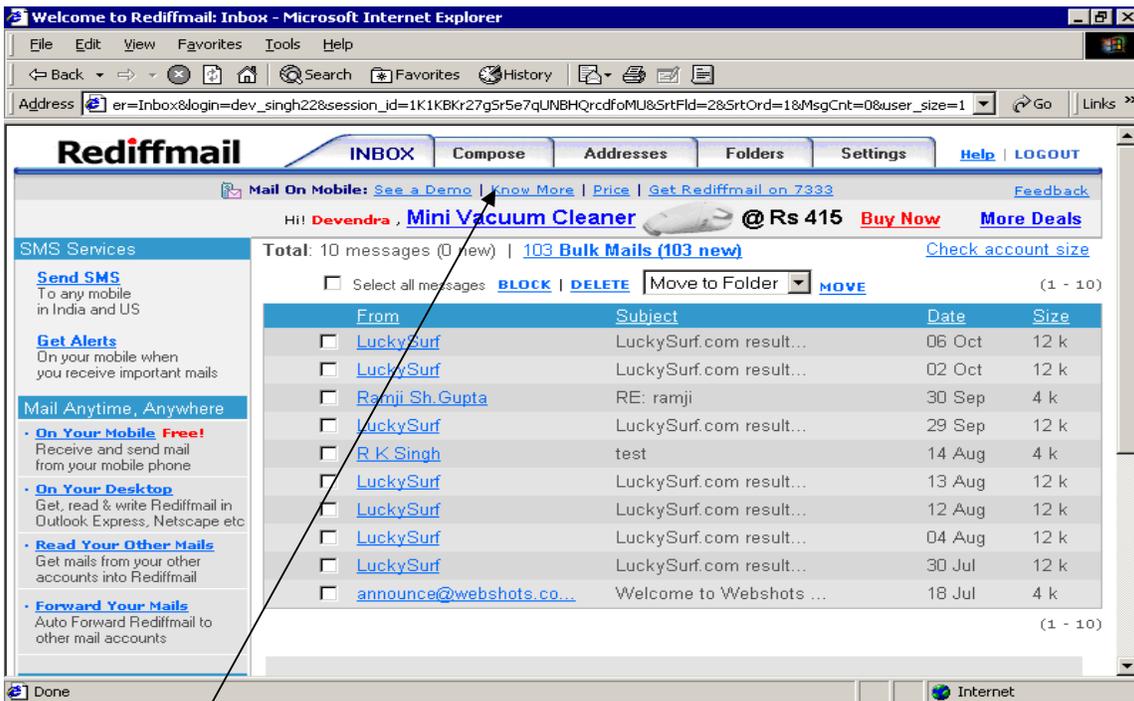
Step 2: Type the web site address on address bar. For e.g. www.rediffmail.com and press enter key

Step 3: The web site will be open as seen below. Type the **user name** and **password** and click on **Go.**The screen appears below
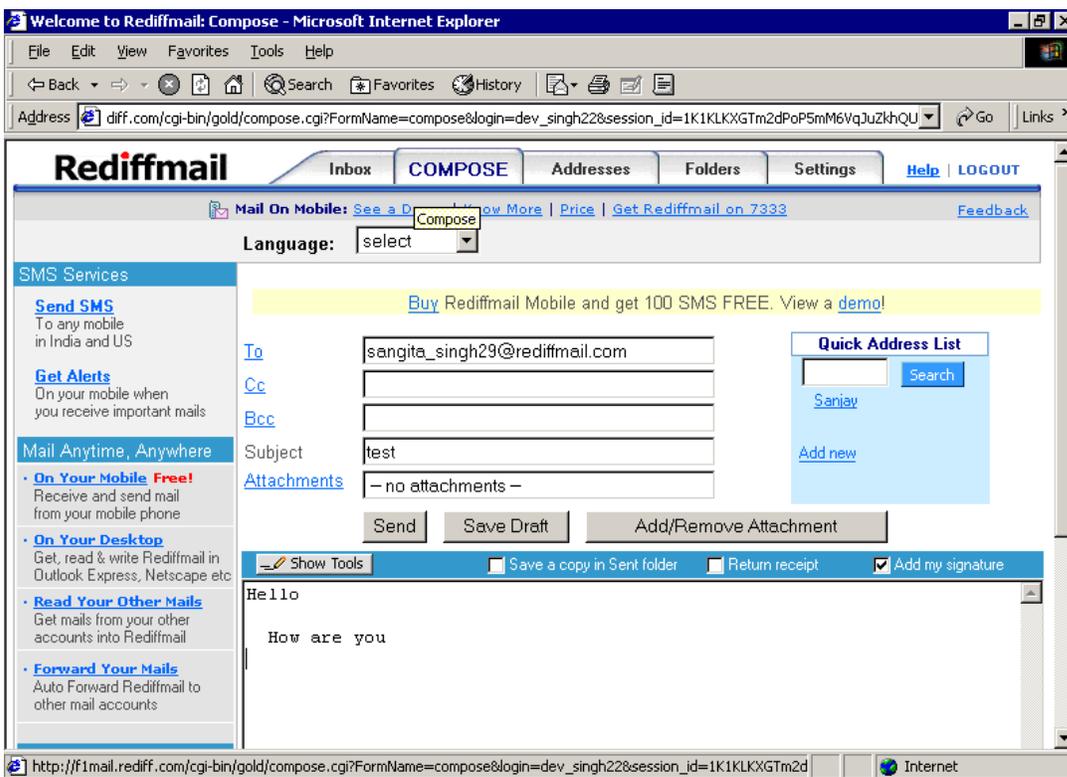
Screen 1:
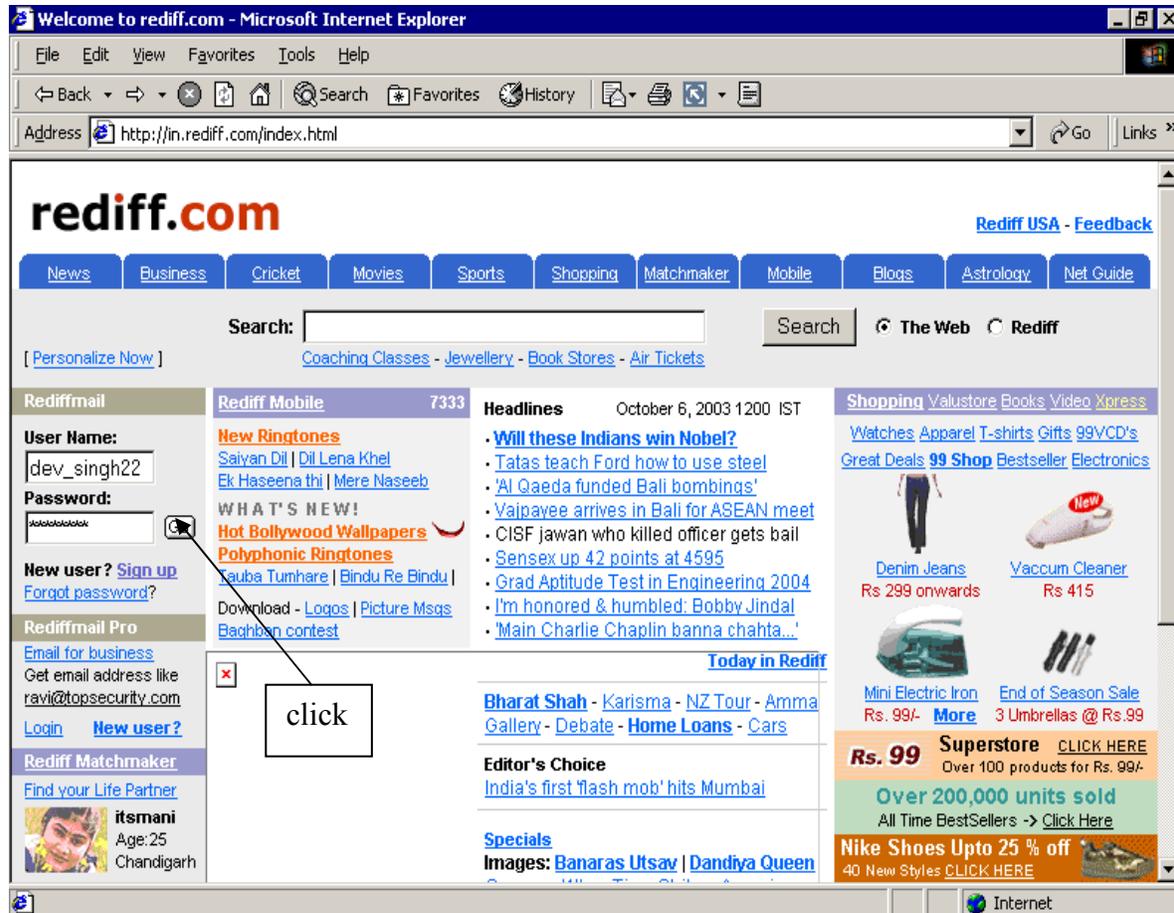
Screen 2: After clicking **Go** in screen 1. The screen appears below

click

Screen 3: After clicking **compose** in screen 2. The screen appears **below**
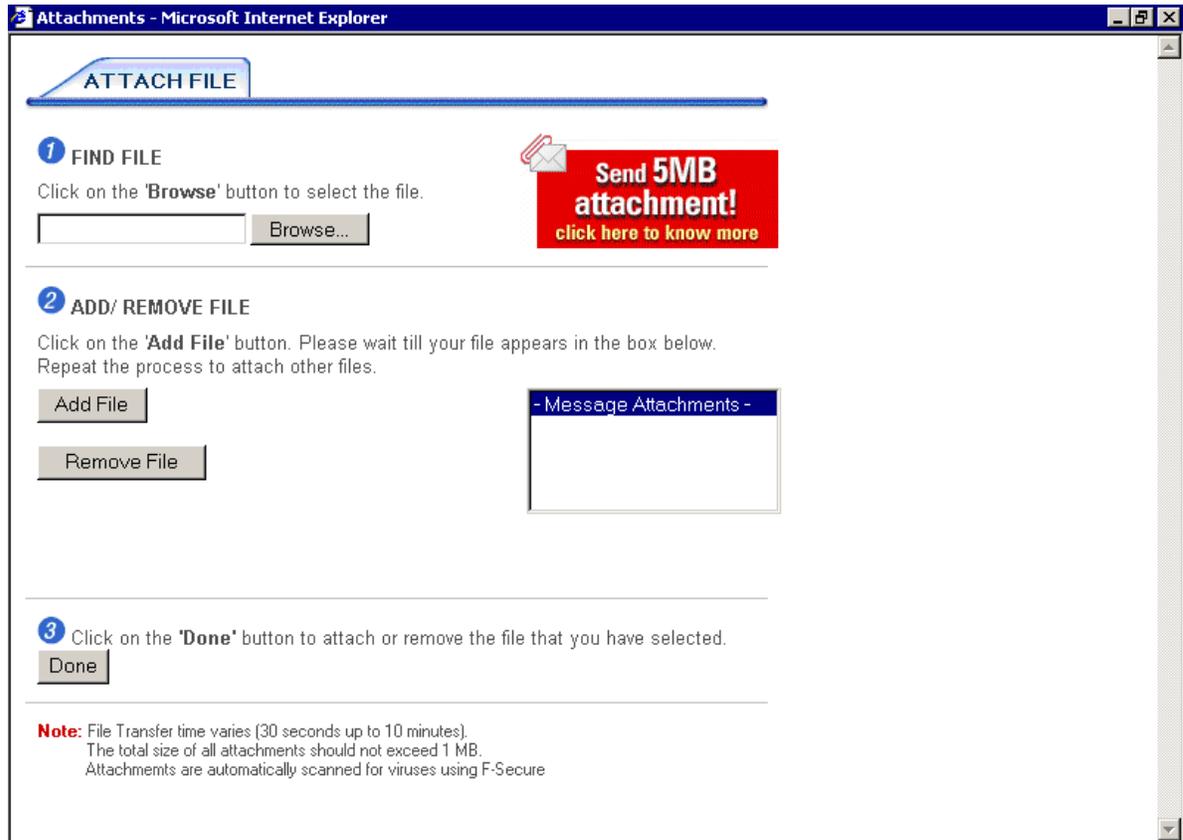

in screen 3

| **To**: Type the e-mail address where you want to send the letter | **Cc**: Type the e-mail address where you want to send the same copy of letter to other | Type the letter |

**Step 4:** click **Add/Remove Attachment** in screen 3. The screen appears below.

Perform all the 3 steps:
1. **Find file:** click on **Browse** button and chose the file which you want to attach with message.
2. **Add file:** After chosen the file click on add file and wait till the file appears in **Message Attachments**
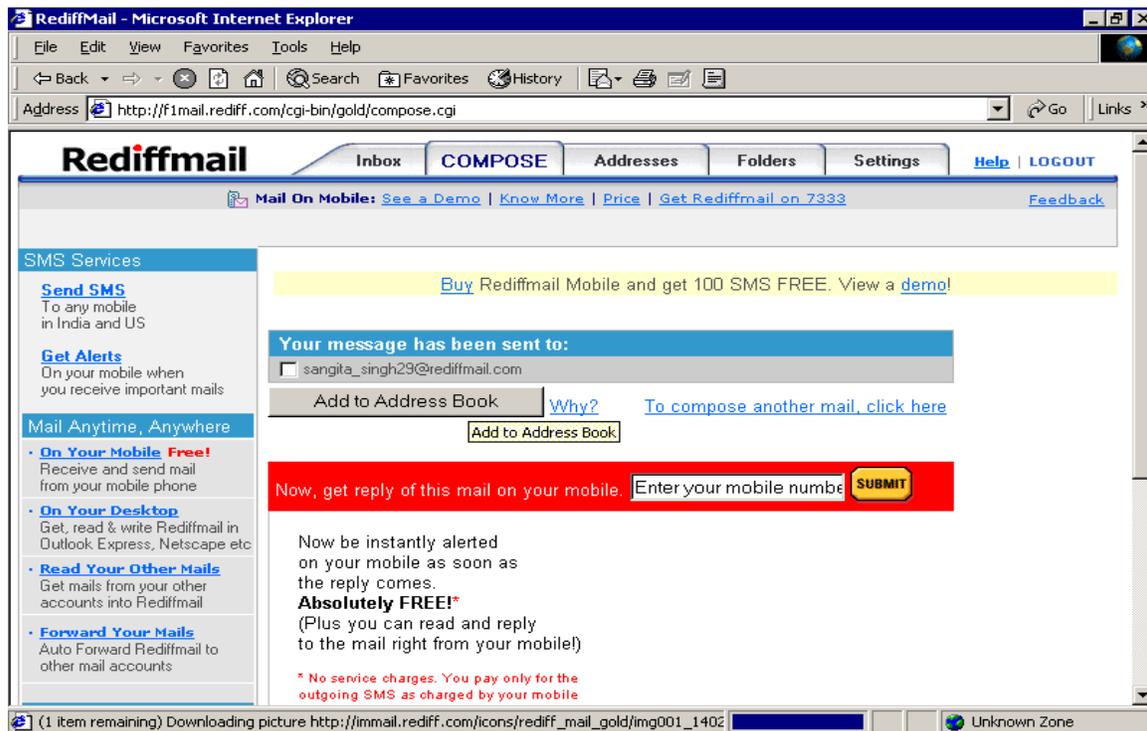3. **Done:** after file shown in Message Attachments box click done.

The screen appears below.
Doing all the three steps. The file shown in **Attachments** columns
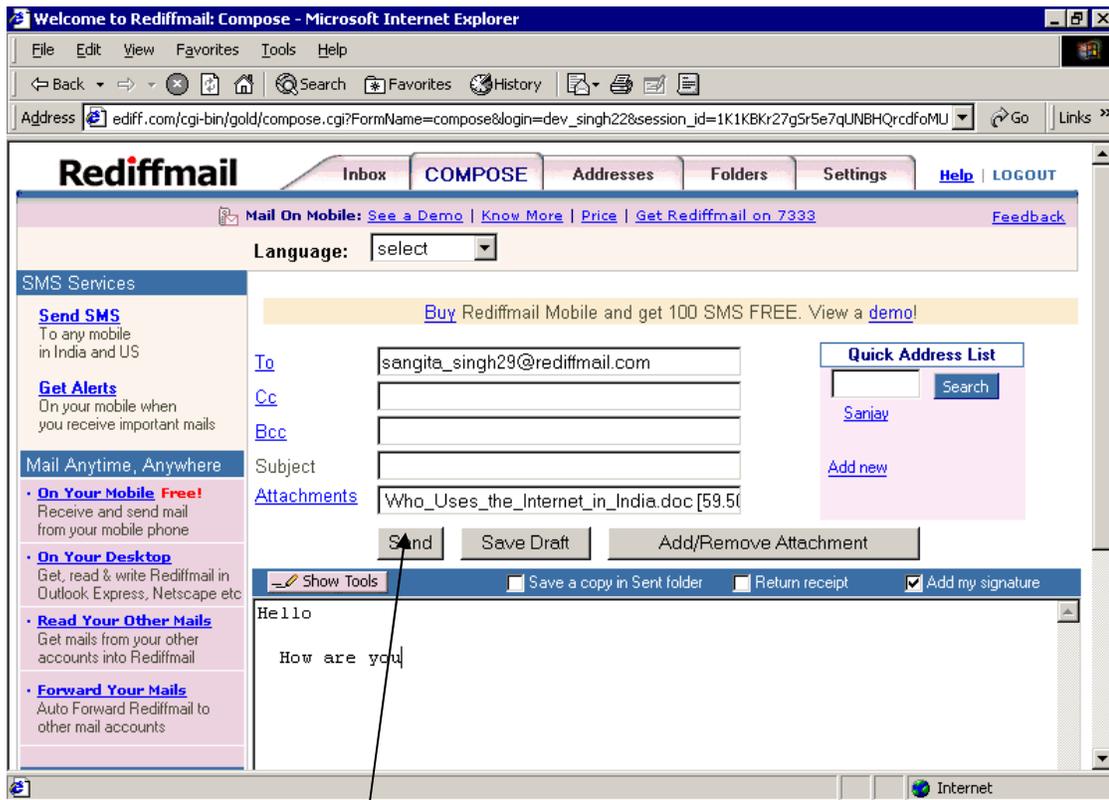
Click on send

After clicking on send button your message has been sent to the given address for e.g. as shown in the screen below.

Messengers:

1. Yahoo Messenger (http://in.messenger.yahoo.com)
2. Windows Live Messenger(http:explore.live.com/windows-live-messeng)
3. Rediff Bol (www.rediff.com/messenger/messenger.htm)
4. Google talk (www.google.com/talk)
5. Skype(www.skype.com)

These messengers are used to video chat, text chat over internet user. For e.g.
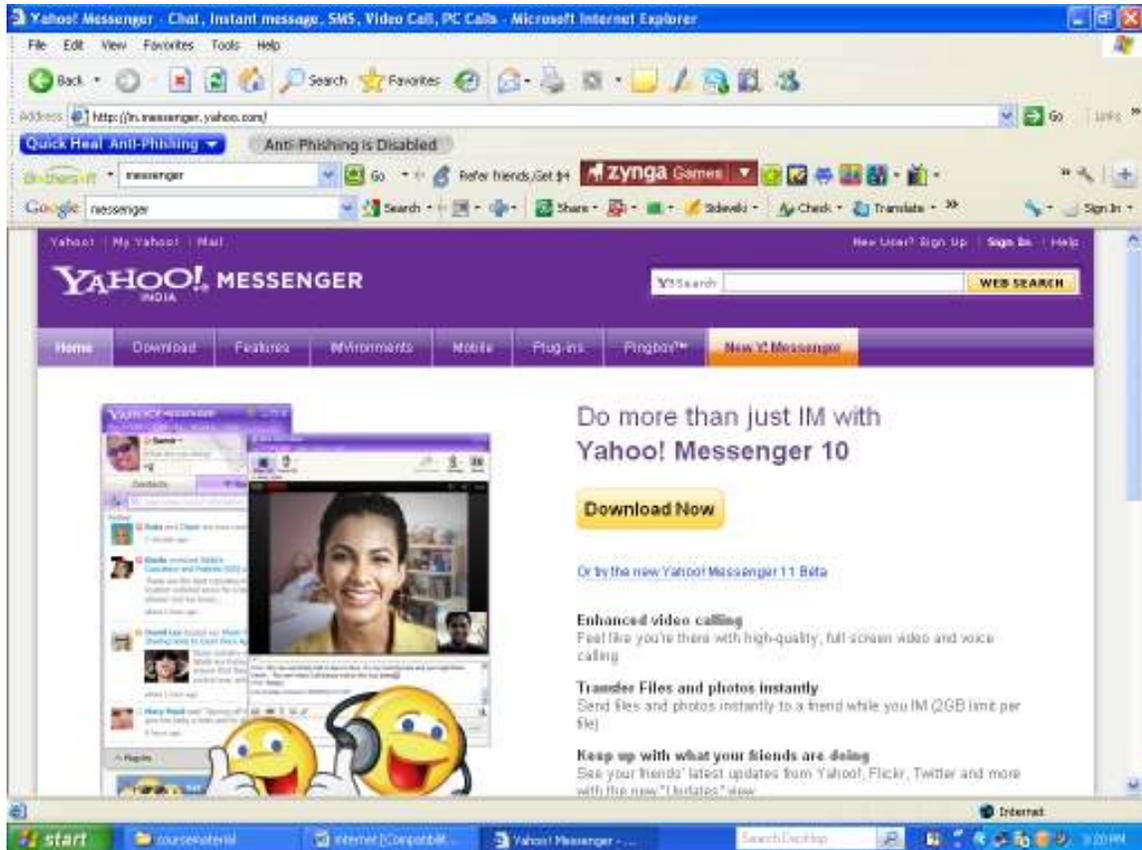
References:

1. **Internet society**

2. **Rediffmail help services**