

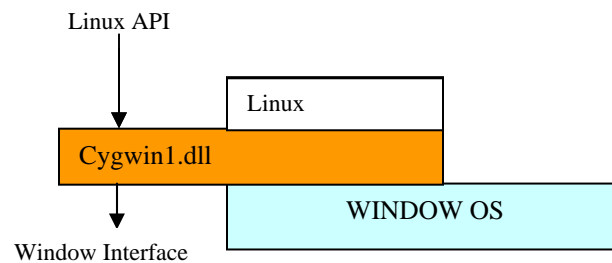
## Eclipse, GCC and Windows

In very simple language I mean that we want to do C programming by GCC on Windows.

### Cygwin

#### The concept:

Actually if we want to run Linux tools on window then actually our requirement is to run Linux API on windows Platform. But window is different kernel then linux kernel. So, there is a Library which is cygwin1.dll, which connect linux API into Windows. So with the help of this library we will able to create linux like environment in Windows.



And when cygwin is installed then Linux commands also run from command prompt.

After cygwin is installed then we will have cygwin directory structure which will same as directory tree on Linux.

## Installing Cygwin from Internet

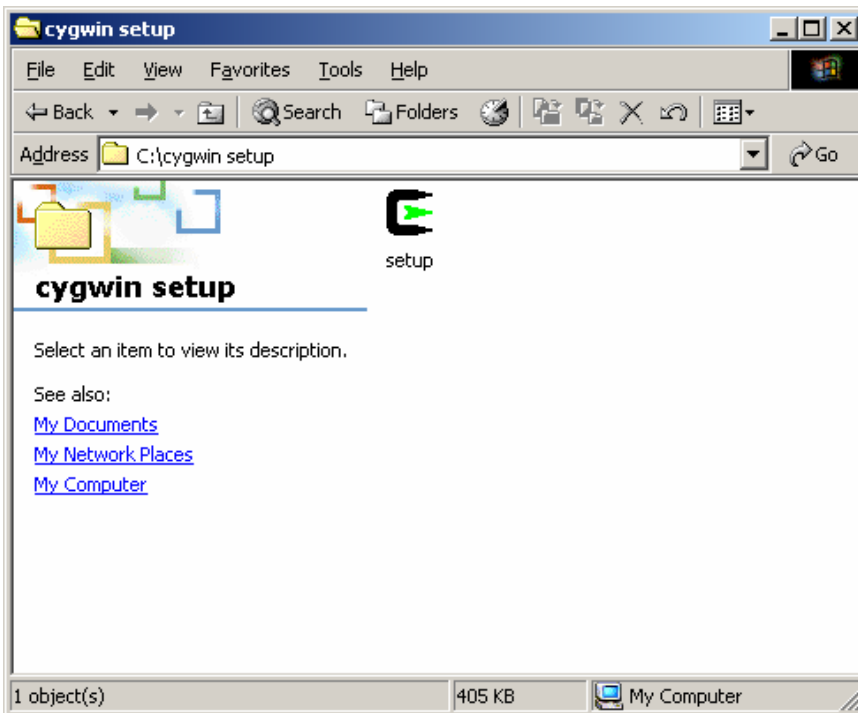
Download the cygwin from following link.

<http://www.cygwin.com/setup.exe>

save it into any folder.

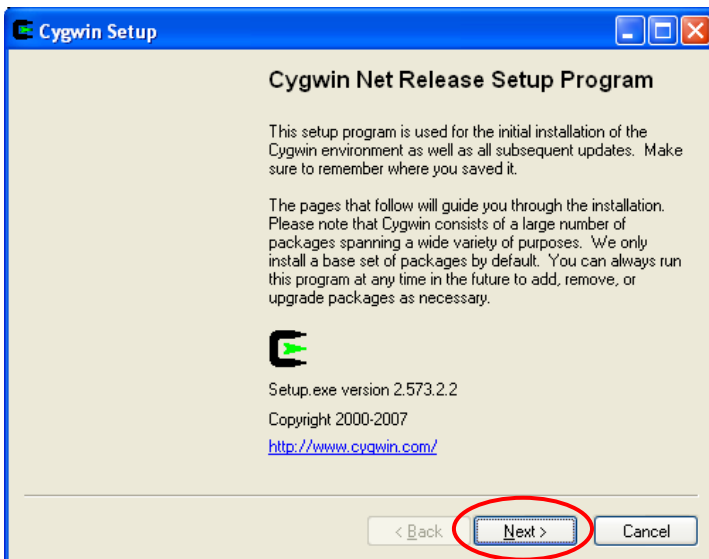
Suppose.

C:\cygwin setup



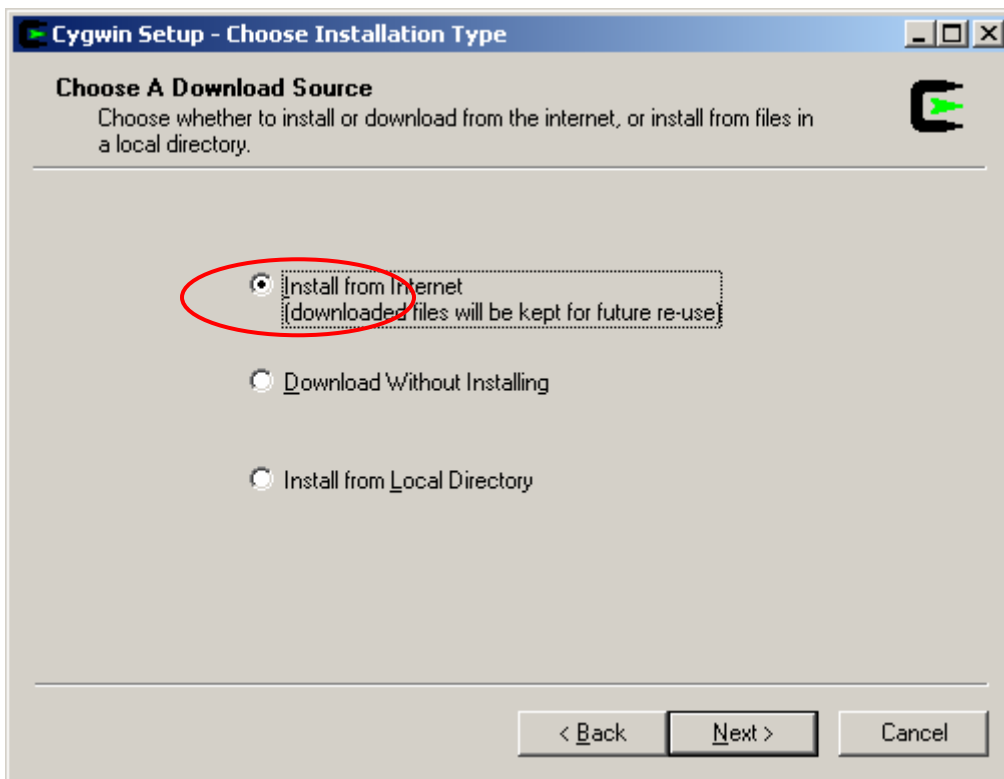
Actually this is link for installing packages from internet.  
Now do following

1. Run the setup by double clicking it

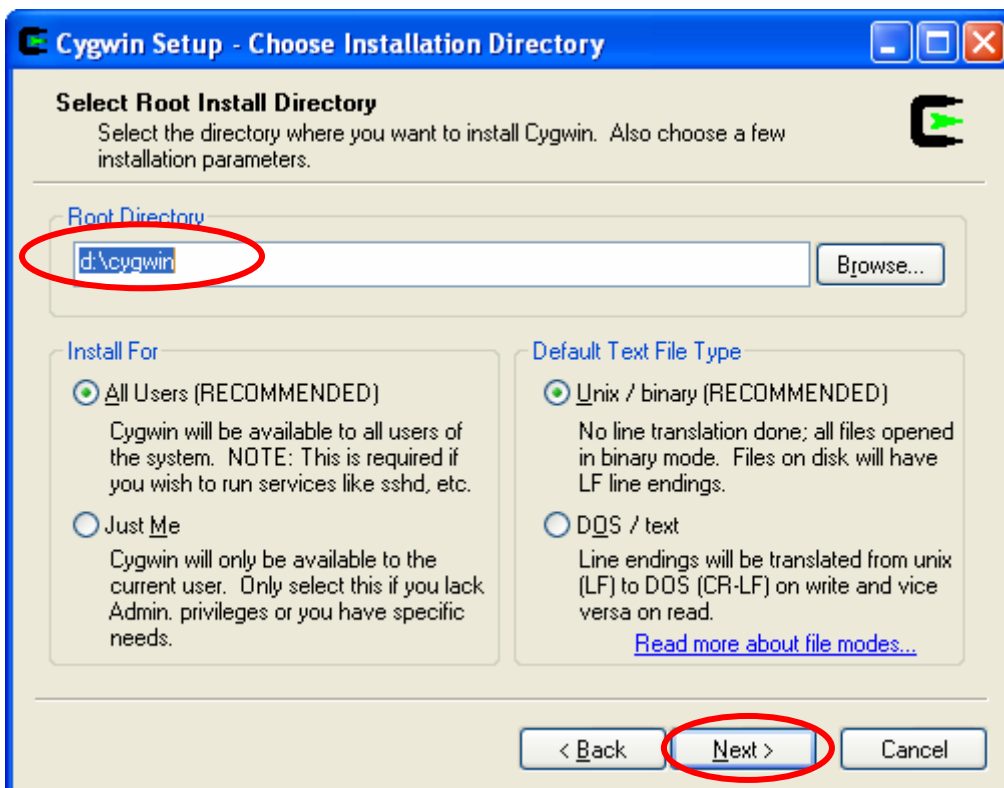


Click Next

2. Select Install from Internet and Click on Next

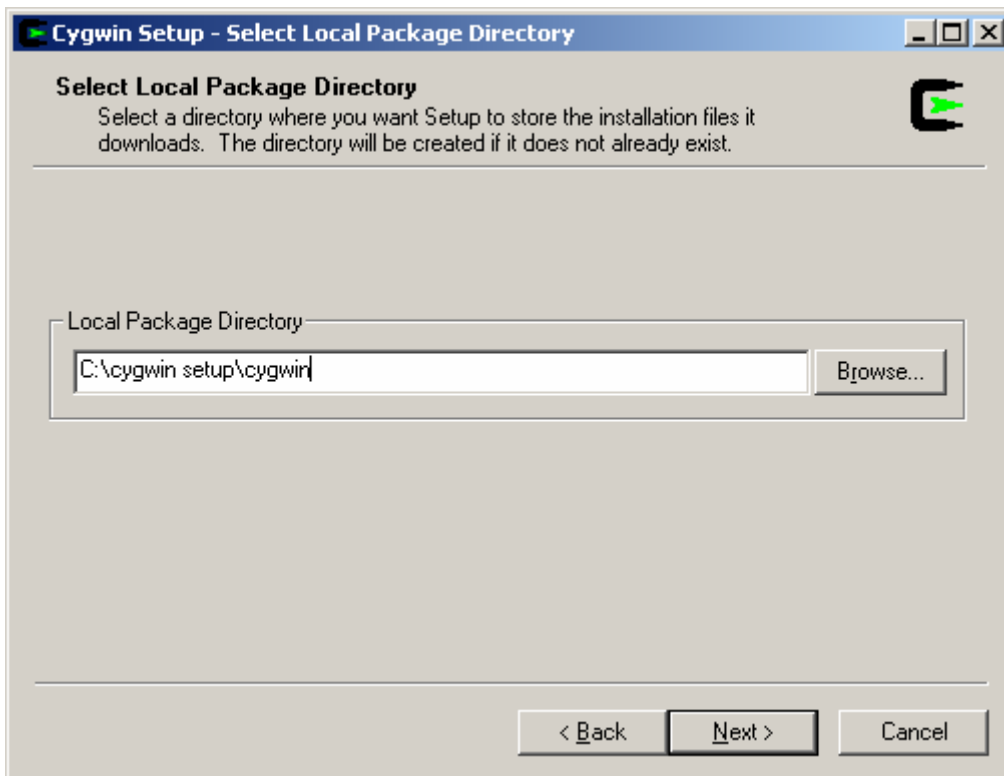


3. Select Root installed directory (In this directory cygwin will installed)



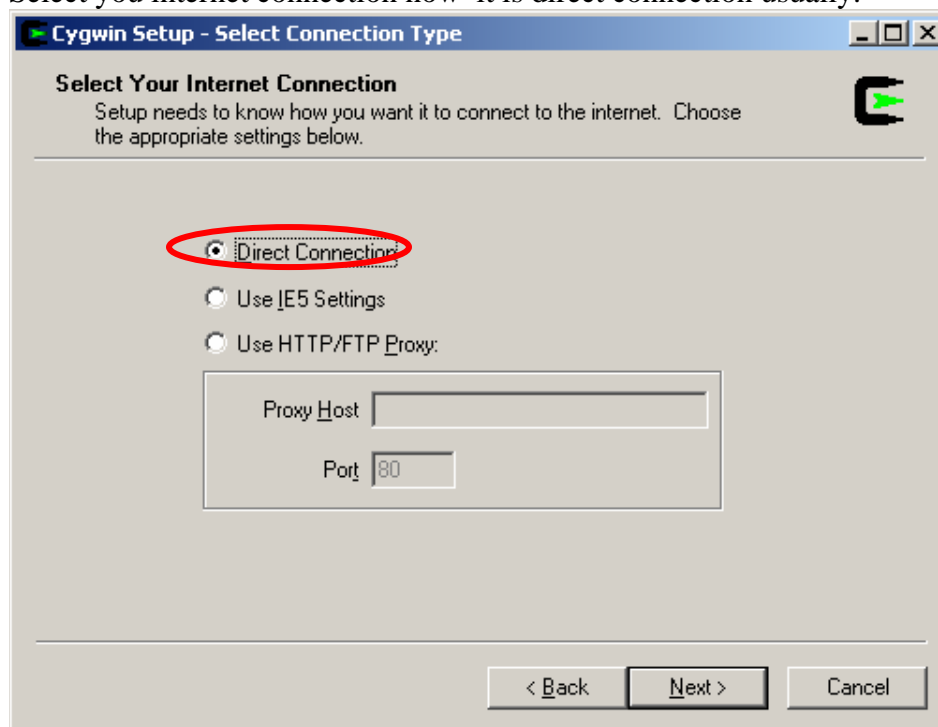
Choose installed for all users and default text file type Unix/binary

4. Select package directory here. In my case this is in c:/ cygwin setup/cygwin

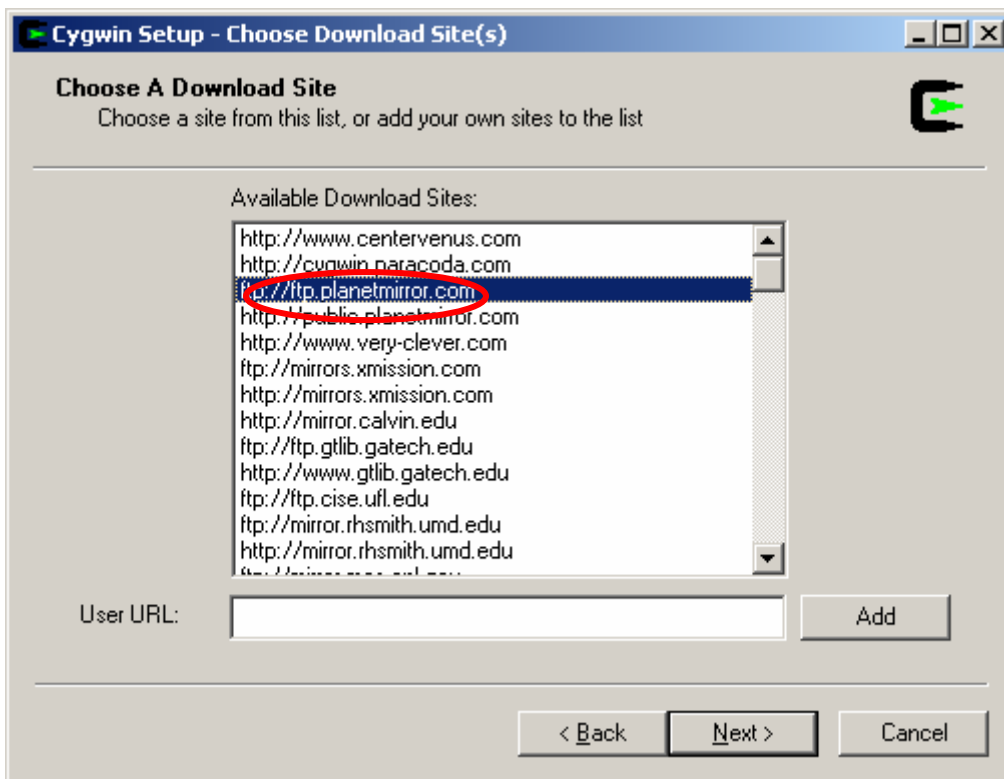


Click on next

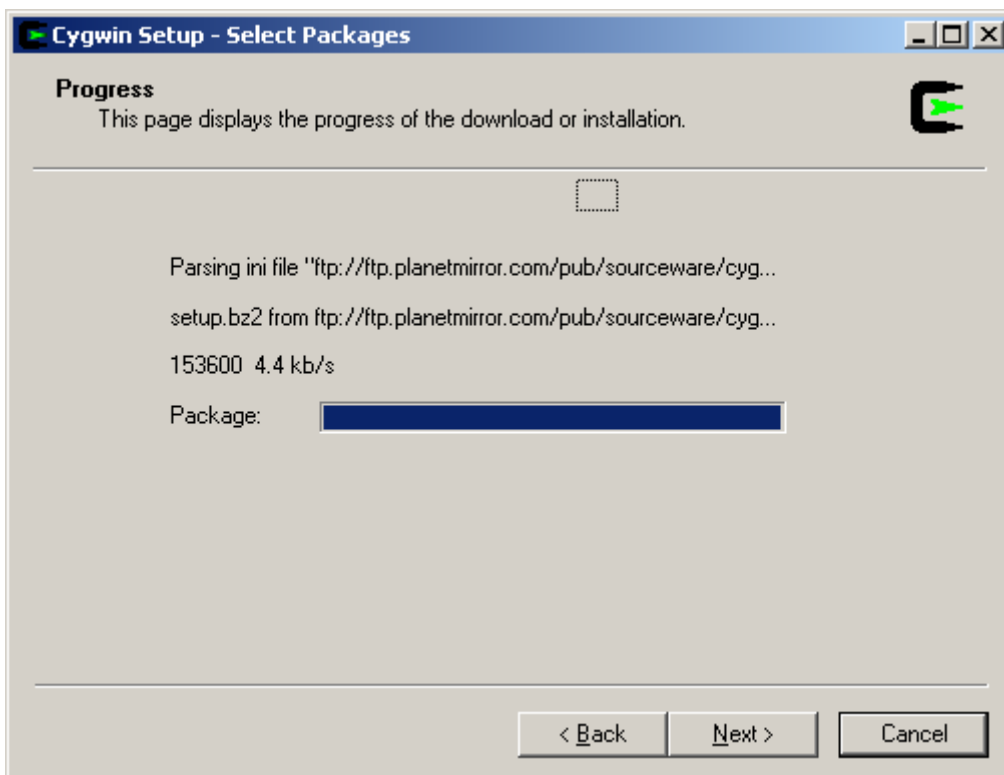
5. Select you internet connection now it is direct connection usually.



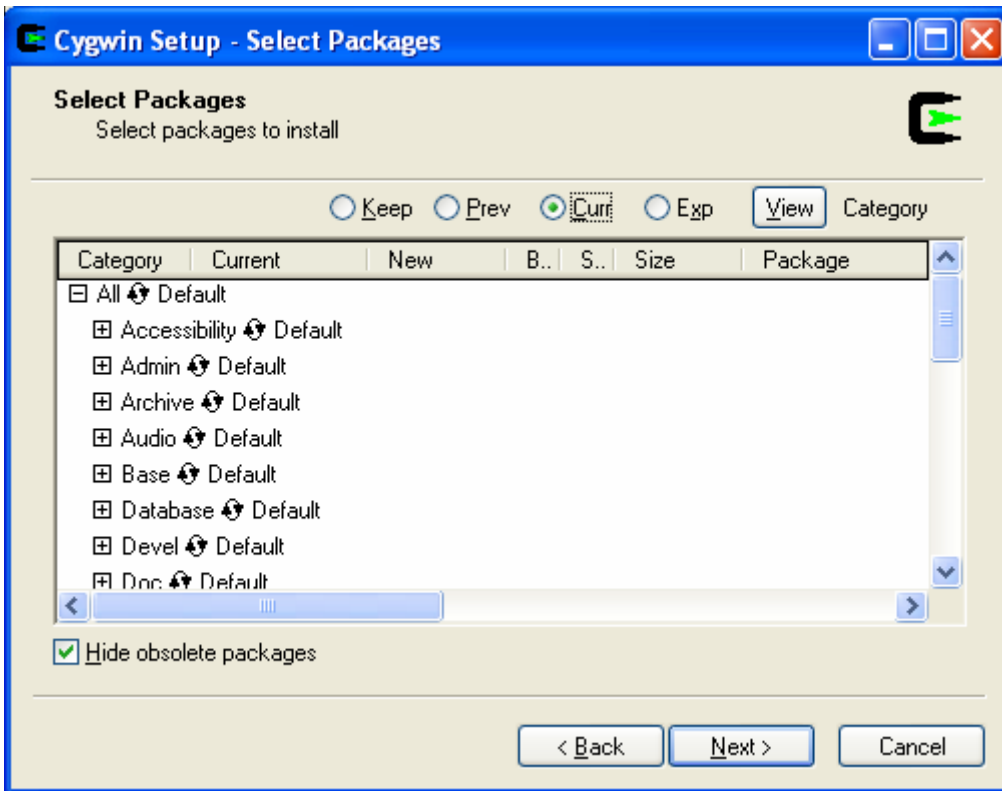
6. Some processing will go, let it happen and select the download location and press next



7. let it do some processing



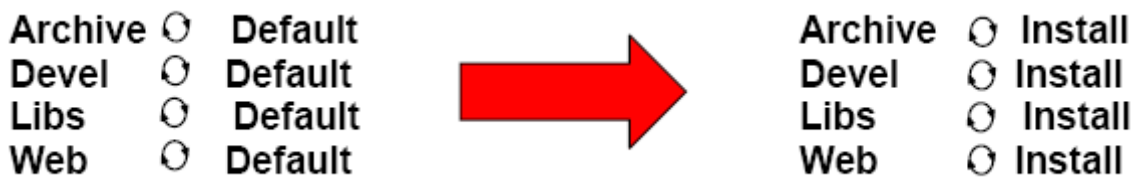
8. After some time it will Now this is turn to select packages which we need to installed



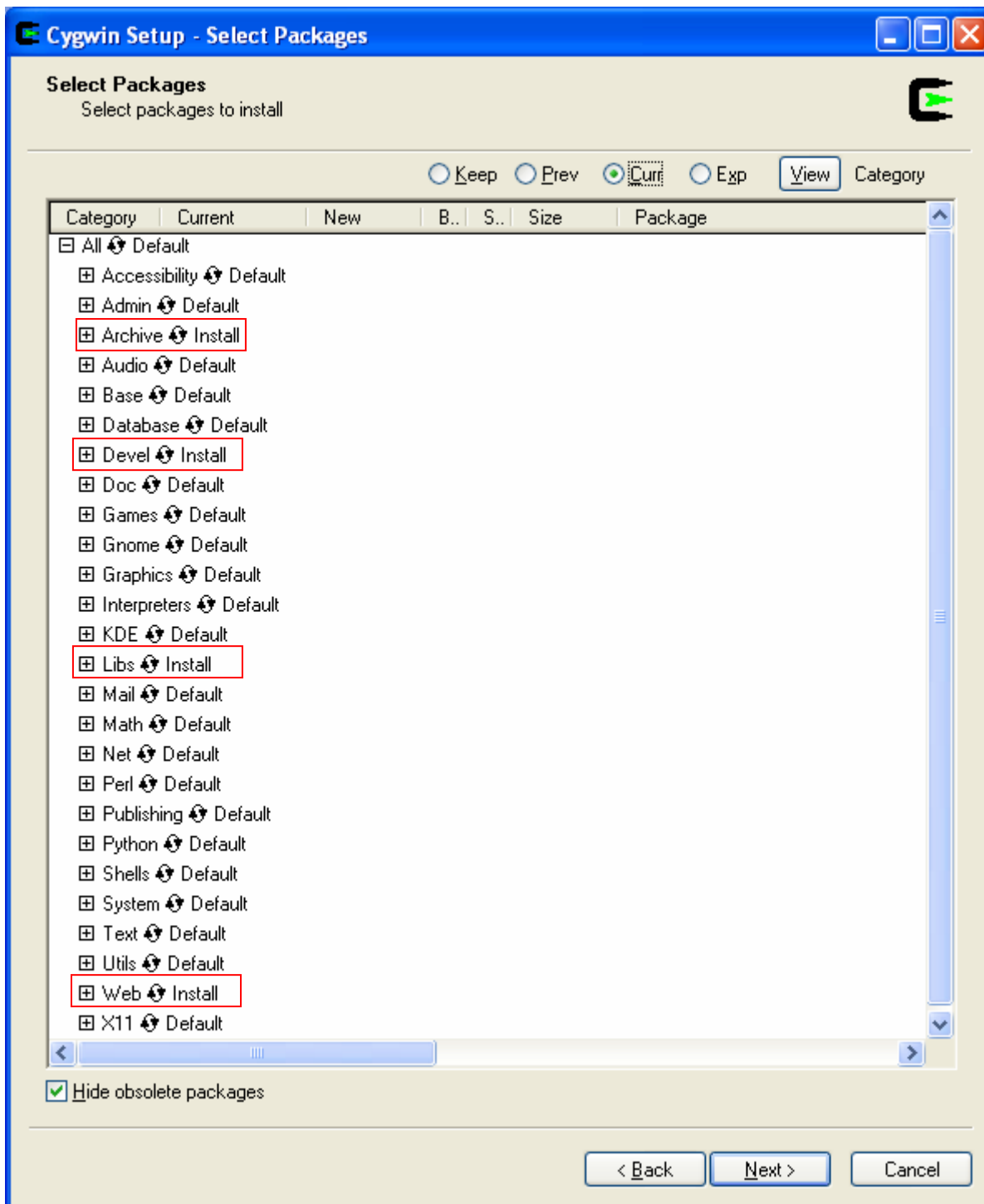
Here we have to select following packages

1. Archive
2. Devel
3. libs
4. webs

for that click on double arrow until you will not get installed next to them. So after selecting above mentioned four packages we will see installed next to them.

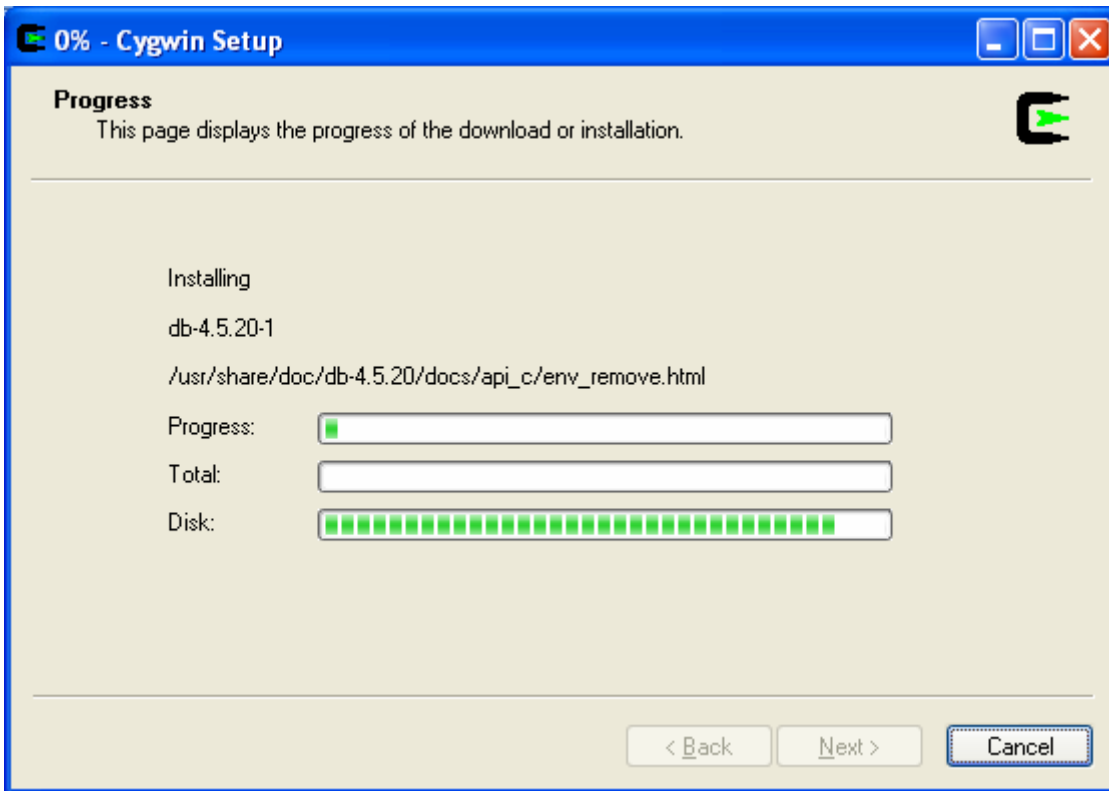


Your select package window should look like that



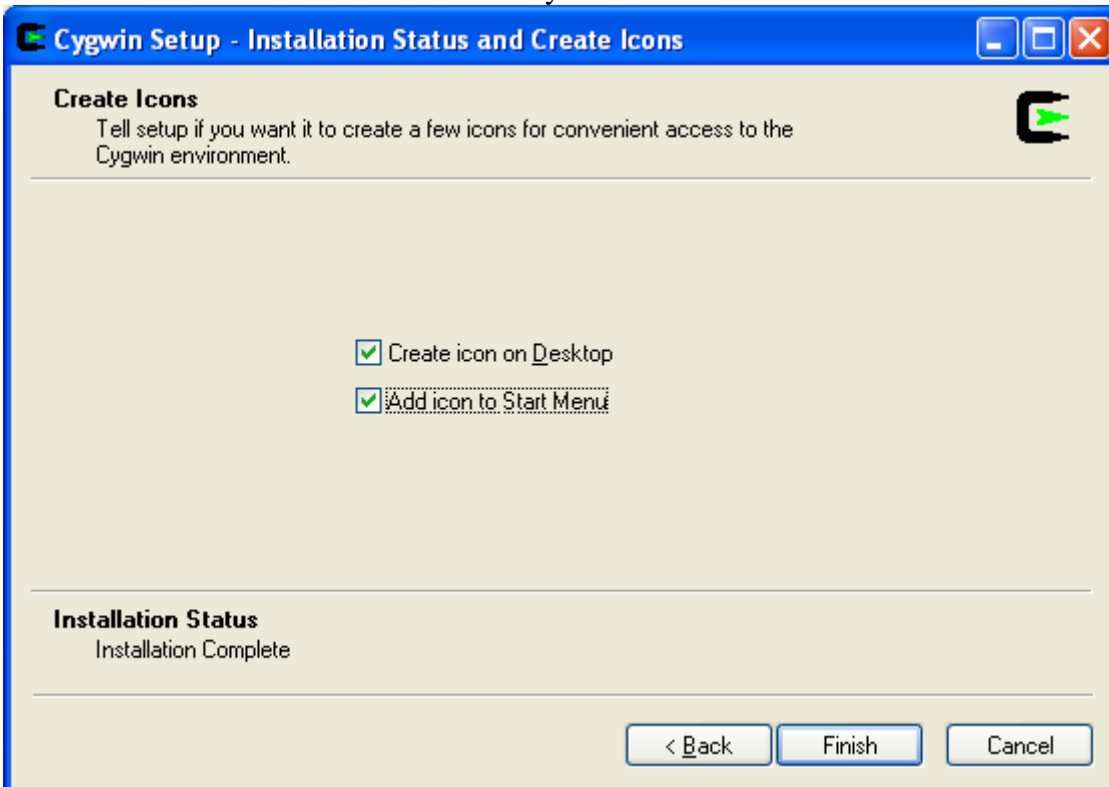
Now click on next.

7. Some processing will begin



Let it to continue. It will take around 15 minutes.

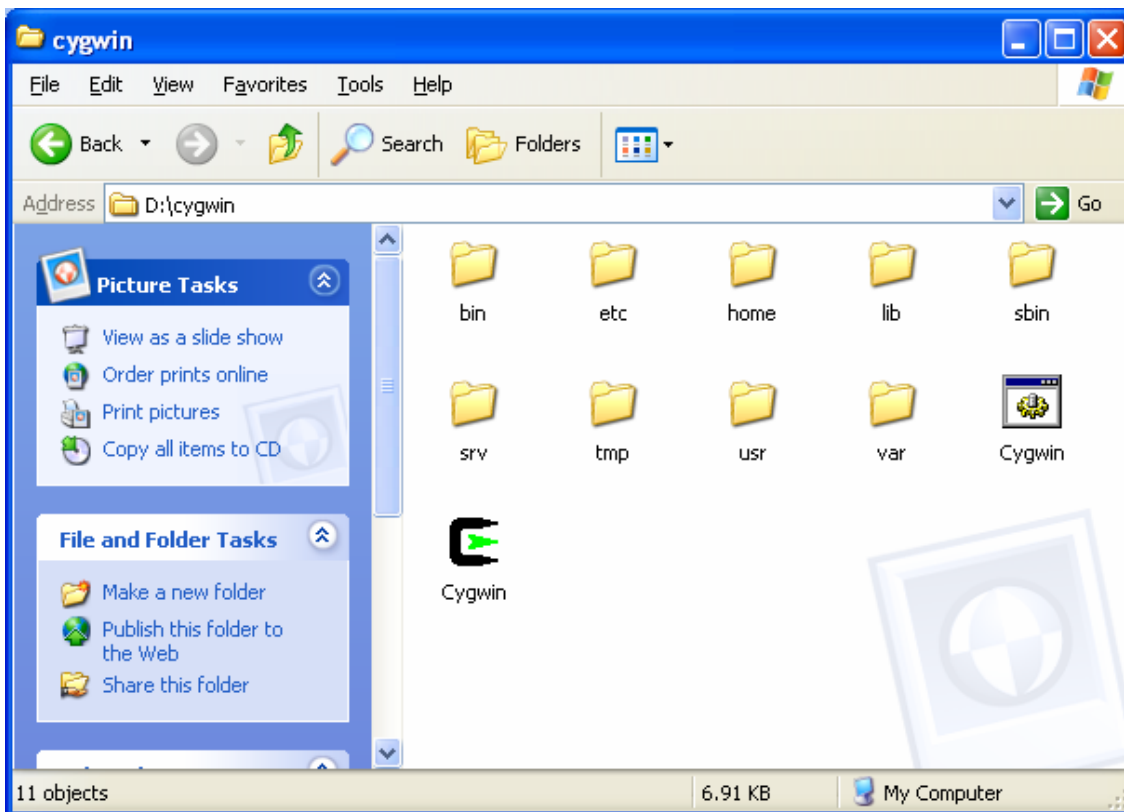
8. Now its time to create icons at your own desired location.



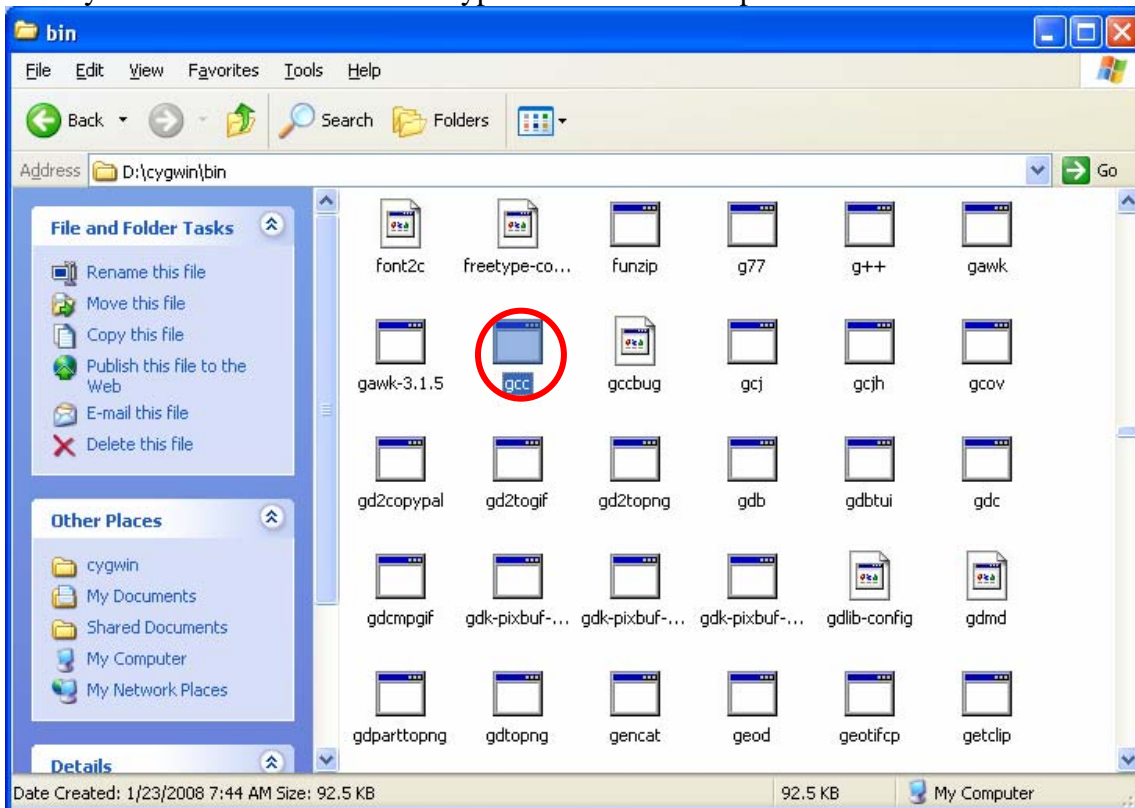
Click finish.

**Let use check if it is properly installed**

Now it is time to give see directory where it is installed.

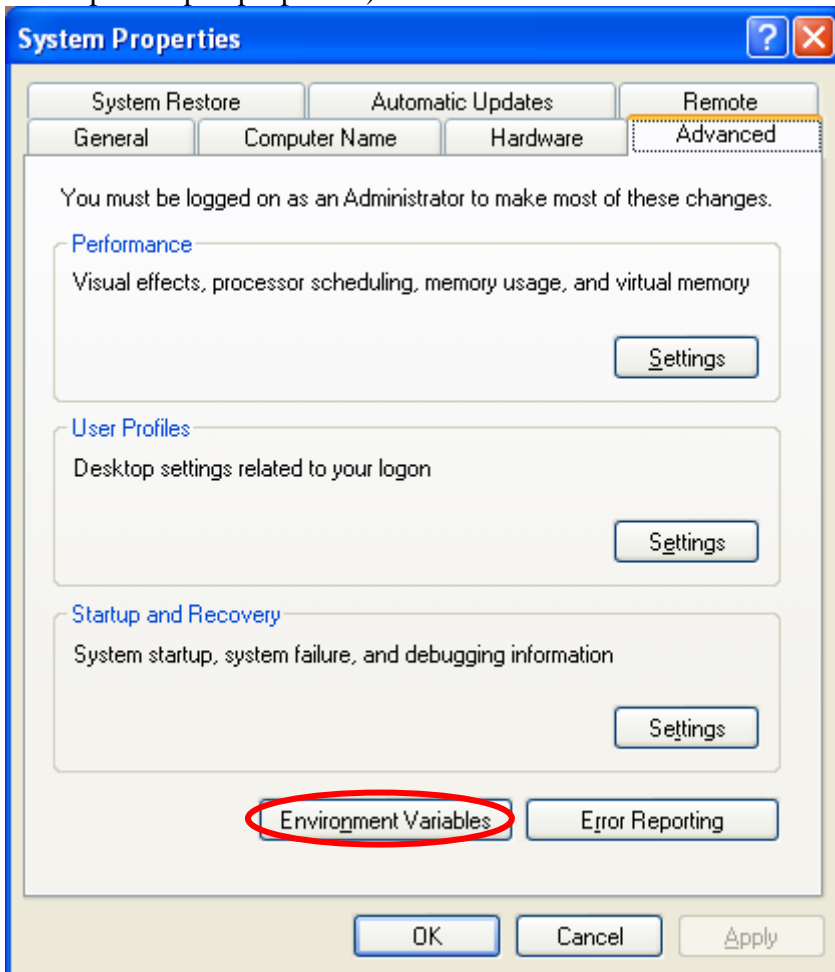


Here you can see we have similar type of directories are present in the Linux.

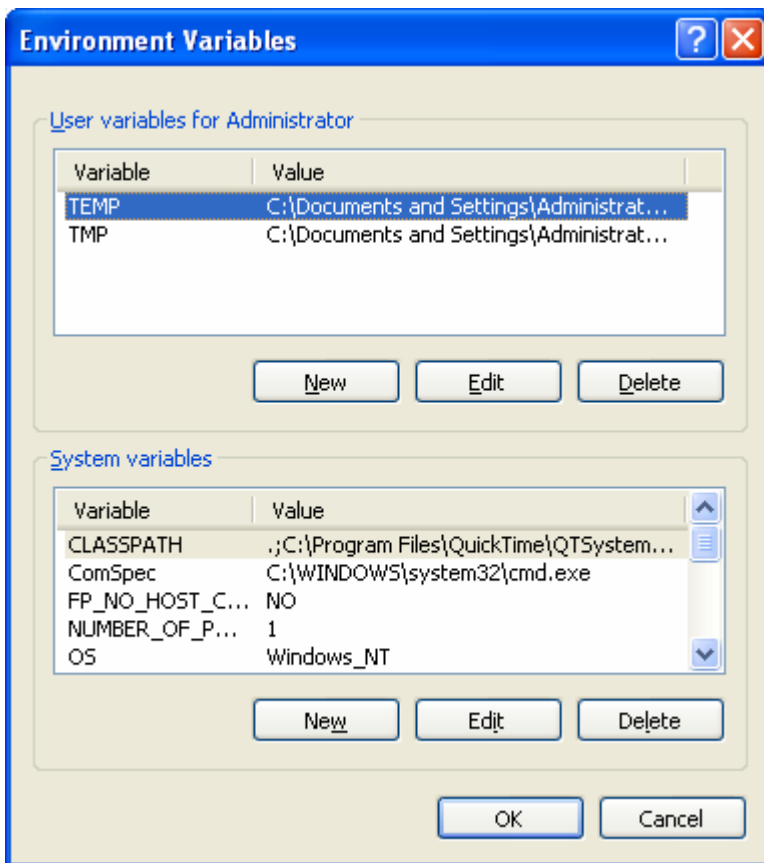


And in bin you can find gcc.

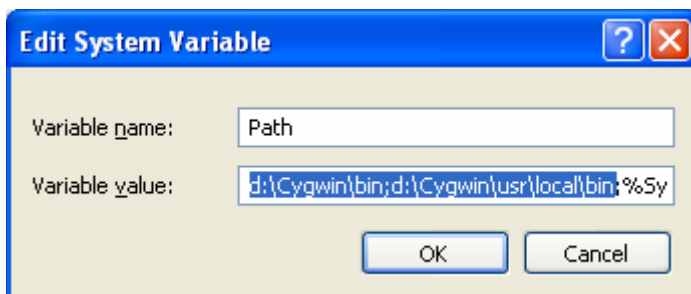
Now we have to Add environment variables. Now open the system properties. (Right click on computer icon on desktop and open properties)



Click on environment variables.

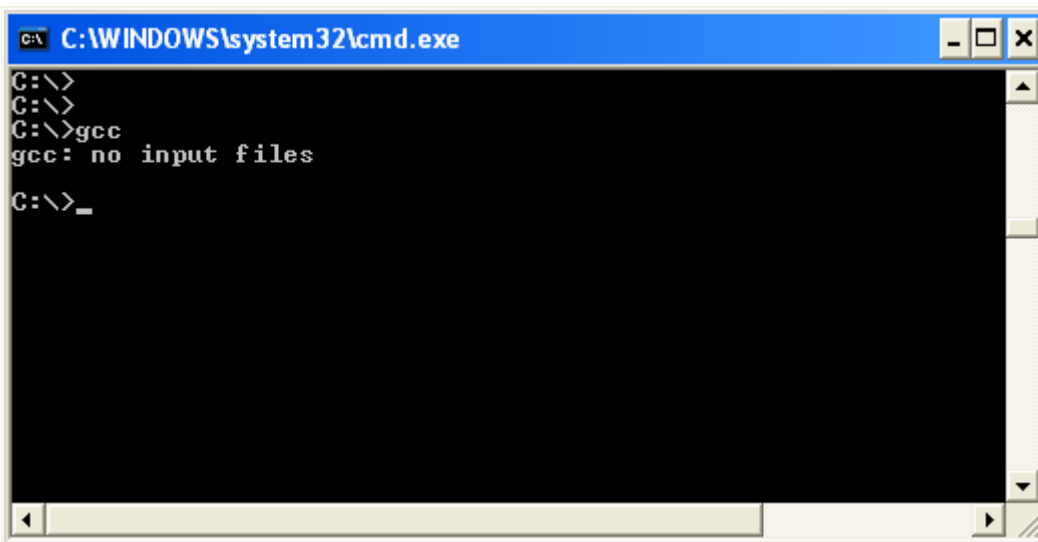


Now choose PATH variable for Edit.



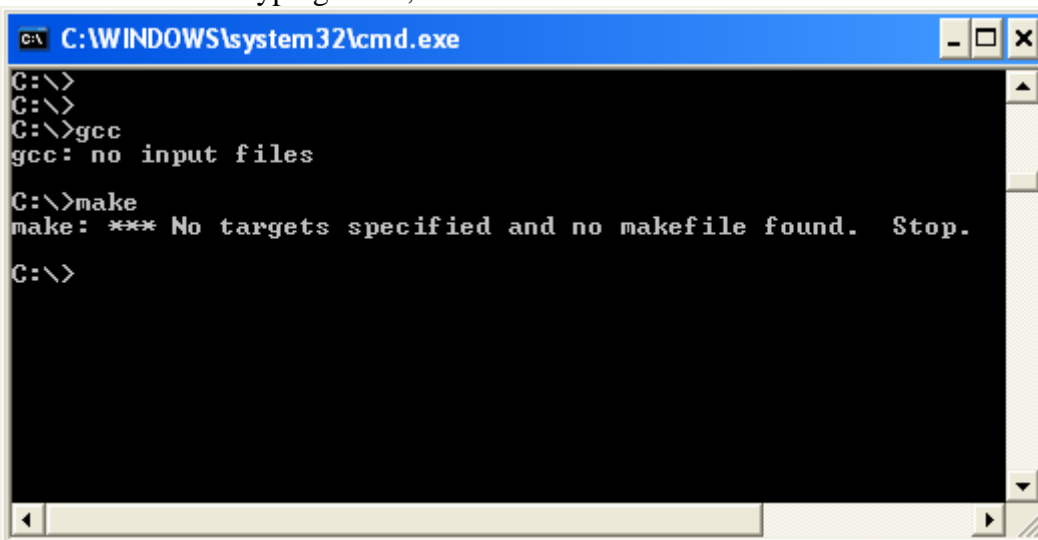
Now add the path of Cygwin install directory in your PATH variable. (***Remember this will be one more entry, old entries should not be deleted.***)

Now open the command prompt and type gcc

A Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe" with a black background. The text shows the user navigating to the root directory (C:\>) and then running the gcc command (C:\>gcc), which returns "gcc: no input files".

```
C:\>  
C:\>  
C:\>gcc  
gcc: no input files  
C:\>_
```

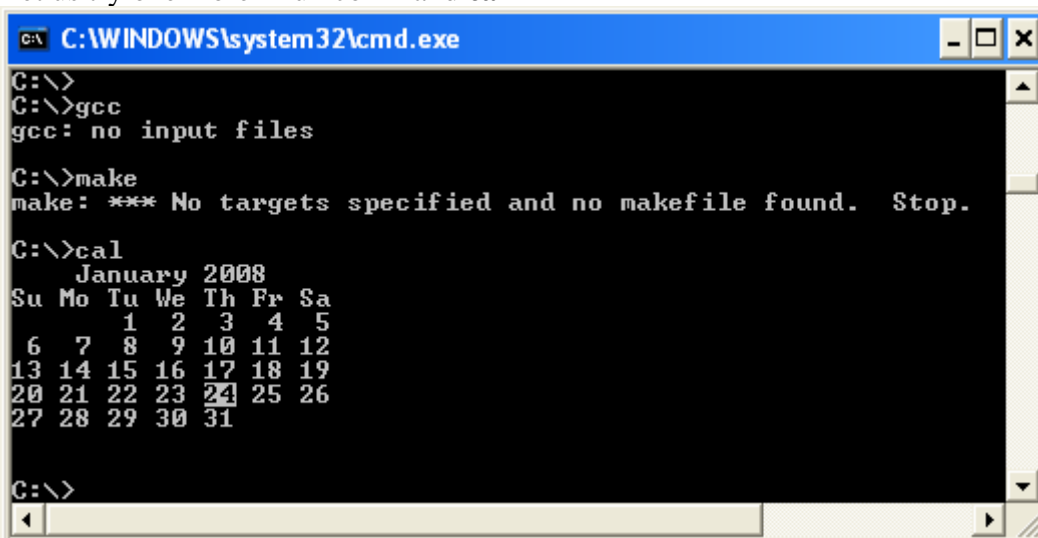
If it is showing like above then gcc is properly installed.  
and let us see after typing make,

A Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe" with a black background. The text shows the user running the make command (C:\>make), which returns "make: \*\*\* No targets specified and no makefile found. Stop."

```
C:\>  
C:\>  
C:\>gcc  
gcc: no input files  
C:\>make  
make: *** No targets specified and no makefile found. Stop.  
C:\>
```

If you see same output then it is also working properly.  
Now the concept **CONGRATULATIONS** you have properly installed Cygwin.

Let us try one more linux command **cal**

A Windows command prompt window titled "C:\WINDOWS\system32\cmd.exe" with a black background. The text shows the user running the cal command (C:\>cal), which displays a calendar for January 2008.

```
C:\>  
C:\>gcc  
gcc: no input files  
C:\>make  
make: *** No targets specified and no makefile found. Stop.  
C:\>cal  
    January 2008  
Su Mo Tu We Th Fr Sa  
   1  2  3  4  5  
  6  7  8  9 10 11 12  
13 14 15 16 17 18 19  
20 21 22 23 24 25 26  
27 28 29 30 31  
C:\>
```

And here you can see your linux commands are now working in your windows environment.

For any Query:

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