

Exercise 2 - WRY TUTORIAL (Sun 26 Jun 2005)

(1) UBUNTU Install Eclipse IDE for Linux

```
-----
(1.1) You must be a root user : su root
password: XXXXXX
```

```
(1.2) Go to /home/admin directory
```

```
(1.3) Create directory for all java related stuff
root@ubuntu28:/home/admin/ # mkdir /usr/local/java
```

```
(1.4) Install the 2 required java packages for eclipse
which are apache-ant-1.6.5 and jdk-1_5_0_03.
Copy the 2 packages to /home/admin directory.
Check the contents of the present directory.
```

```
root@ubuntu28:/home/admin/ # ls -al
Extract the binary packages.
root@ubuntu28:/home/admin/ # bunzip2 apache-ant-1.6.5-bin.tar.bz2
root@ubuntu28:/home/admin/ # tar -xvf apache-ant-1.6.5-bin.tar
root@ubuntu28:/home/admin/ # ls -al
root@ubuntu28:/home/admin/ # ./jdk-1_5_0_03-linux.i586.bin
```

```
Check the contents of the present directory
root@ubuntu28:/home/admin/ # ls -al
```

```
(1.5) Move the 2 extracted directories to /usr/local/java
root@ubuntu28:/home/admin/ # mv ./apache-ant-1.6.5 /usr/local/java
root@ubuntu28:/home/admin/ # mv ./jdk-1_5_0_03 /usr/local/java
```

```
(1.6) Check if you have moved the 2 directories
root@ubuntu28:/home/admin/ # ls -al
root@ubuntu28:/home/admin/ # ls -al /usr/local/java
```

```
(1.7) Set the environment variables for ANT HOME and JAVA HOME
root@ubuntu28:/home/admin/ # export ANT_HOME=/usr/local/java/apache-ant-1.6.5
root@ubuntu28:/home/admin/ # export JAVA_HOME=/usr/local/java/jdk-1_5_0_03
```

```
(1.8) Set the path of ANT (Java Compiler)
root@ubuntu28:/home/admin/ # export PATH=${PATH}:${ANT_HOME}/bin
```

```
(1.9) Copy Eclipse Installation File into /home/admin
```

INSTALL ECLIPSE BASE FOR UBUNTU (RUN JAVA)

```
-----
[root@nbwrylinux admin]# pwd
/home/admin
[root@nbwrylinux admin]# date
Tue Jul 5 11:22:39 MYT 2005
[root@nbwrylinux admin]#
```

UNZIP ECLIPSE FOR LINUX

```
-----
[root@nbwrylinux admin]# unzip eclipse-SDK-3.0.2-linux-gtk.zip
....
....
inflating: eclipse/features/org.eclipse.sdk_3.0.2/feature.xml
inflating: eclipse/cpl-v10.html
inflating: eclipse/notice.html
inflating: eclipse/eclipse
creating: eclipse/configuration/
```

```

inflating: eclipse/configuration/config.ini
inflating: eclipse/startup.jar
creating: eclipse/readme/
inflating: eclipse/readme/readme_eclipse.html
inflating: eclipse/.eclipseproduct
inflating: eclipse/icon.xpm
[root@nbwrylinux admin]# ls
eclipse Eclipse-302-install.txt Eclipse-302-install.txt~ eclipse-SDK-3.0.2-
linux-gtk.zip hello.cpp~ wryl
[root@nbwrylinux admin]#

```

CHECK DESTINATION FOLDER TO INSTALL ECLIPSE /usr/local/java

```

-----
[root@nbwrylinux admin]# ls /usr/local/java
apache-ant-1.6.5  jdk1.5.0
[root@nbwrylinux admin]#

```

MOVE ECLIPSE TO /usr/local/java

```

-----
[root@nbwrylinux admin]# mv ./eclipse /usr/local/java
[root@nbwrylinux admin]#

```

GO TO FOLDER /usr/local/java/eclipse

```

-----
[root@nbwrylinux admin]# cd /usr/local/java/
[root@nbwrylinux java]# ls -al
total 44
drwxr-xr-x  10 root root 4096 Jun 23 23:25 .
drwxr-xr-x  19 root root 4096 Jun 23 00:01 ..
drwxr-xr-x   6 root root 4096 Jun  2 21:15 apache-ant-1.6.5
drwxr-xr-x  10 root root 4096 May 24 14:06 eclipse
drwxr-xr-x   9 root root 4096 Sep 15  2004 jdk1.5.0
[root@nbwrylinux java]#

```

GO INTO THE ECLIPSE FOLDER

```

-----
[root@nbwrylinux java]# cd eclipse
[root@nbwrylinux eclipse]# ls -al
total 136
drwxr-xr-x  10 root root  4096 May 24 14:06 .
drwxr-xr-x  10 root root  4096 Jun 23 23:25 ..
drwxrwxr-x   8 root root  4096 Mar  7 00:33 configuration
-rw-rw-r--   1 root root 15049 Sep 17  2004 cpl-v10.html
-rwxr-xr-x   1 root root 27119 Sep 17  2004 eclipse
-rw-rw-r--   1 root root   59 Sep 17  2004 .eclipseproduct
drwxr-xr-x  14 root root  4096 Mar  7 00:30 features
-rw-rw-r--   1 root root 10489 Sep 17  2004 icon.xpm
drwxrwxrwx   2 root root  4096 Dec 18  2004 links
-rw-rw-r--   1 root root  5810 Sep 17  2004 notice.html
drwxr-xr-x 122 root root 12288 Mar  7 00:31 plugins
drwxrwxr-x   2 root root  4096 Sep 17  2004 readme
-rw-rw-r--   1 root root 19465 Sep 17  2004 startup.jar
drwxr-xr-x   3 root root  4096 Dec 18  2004 workspace
drwxr-xr-x   3 root root  4096 Dec 18  2004 workspace2
drwxr-xr-x   3 root root  4096 Dec 18  2004 workspace3
[root@nbwrylinux eclipse]#

```

TO EXECUTE ECLIPSE, RUN THE EXECUTABLE eclipse (GREEN FILE) --> THEN WAIT

```

-----
[root@nbwrylinux eclipse]# pwd
/usr/local/java/eclipse
[root@nbwrylinux eclipse]# ./eclipse
-----

```

ALHAMDULILLAH DONE. YOU CAN RUN JAVA NOW USING ECLIPSE.

(2) HELP FILE. Explore the Eclipse IDE functionalities (JAVA).

=====

TEST A SMALL JAVA PROGRAM bismillah.java IN ECLIPSE

=====

```
public class bismillah {
    public static void main(String[] args) {
        System.out.println("Bismillah Hirrahma Nirrahim \n");
        System.out.println("Date: 26 Jun 2005 \n");
    }
}
```

IN ECLIPSE, Run, Run As, Java Application. THEN SEE CONSOLE.

Bismillah Hirrahma Nirrahim

Date: 26 Jun 2005

MODIFY THE PROGRAM IN GEDIT (NOTEPAD), RUN IN TERMINAL.

=====

// Filename: bismillah_terminal.java

```
public class bismillah_terminal {
    public static void main(String[] args) {
        System.out.println("Bismillah Hirrahma Nirrahim \n");
        System.out.println("Date: 26 Jun 2005 \n");

        System.out.println("Compile and Run in TERMINAL \n");
    }
}
```

CHECK THE PATH OF THE javac COMPILER

```
[root@nbwrylinux bin]# echo $PATH
/usr/local/java/jdk1.5.0/bin:/usr/local/java/jdk1.5.0/jre/bin:/usr/kerberos/sb
in:/usr/kerberos/bin:/usr/local/sbin:/usr/local/bin:/sbin:/bin:/usr/sbin:/usr/
bin:/usr/X11R6/bin
```

COMPILE THE JAVA SOURCE FILE

```
[root@nbwrylinux admin]# javac ./bismillah_terminal.java
[root@nbwrylinux admin]# ls -al
total 40
drwxr-xr--  2 root root 4096 Jun 27 00:01 .
drwxr-xr-x 17 root root 4096 Jun 26 23:27 ..
-rw-r--r--  1 root root  548 Jun 27 00:01 bismillah_terminal.class
-rw-r--r--  1 root root  286 Jun 26 23:54 bismillah_terminal.java
-rwxr-xr-x  1 root root 7449 Jun 26 23:29 hello
-rw-r--r--  1 root root  402 Jun 26 23:28 hello.cpp
-rw-r--r--  1 root root  378 Jun 26 23:27 hello.cpp~
-rw-r--r--  1 root root  378 Jun 26 23:27 Untitled 1
```

EXECUTE THE JAVA CLASS

```
[root@nbwrylinux admin]# java bismillah_terminal
Bismillah Hirrahma Nirrahim
```

Date: 26 Jun 2005

Compile and Run in TERMINAL

```
[root@nbwrylinux admin]#
=====
TRY COMPILER VERBOSE INSTEAD OF QUIET (SEE WHAT HAPPENS)
=====
[root@nbwrylinux admin]# javac -verbose ./bismillah_terminal.java
[parsing started ./bismillah_terminal.java]
[parsing completed 89ms]
[search path for source files: [..]]
[search path for class files: [/usr/local/java/jdk1.5.0/jre/lib/rt.jar,
/usr/local/java/jdk1.5.0/jre/lib/jsse.jar,
/usr/local/java/jdk1.5.0/jre/lib/jce.jar,
/usr/local/java/jdk1.5.0/jre/lib/charsets.jar,
/usr/local/java/jdk1.5.0/jre/lib/ext/dnsns.jar,
/usr/local/java/jdk1.5.0/jre/lib/ext/sunjce_provider.jar,
/usr/local/java/jdk1.5.0/jre/lib/ext/sunpkcs11.jar,
/usr/local/java/jdk1.5.0/jre/lib/ext/localedata.jar, ..]]
[loading /usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/lang/Object.class)]
[loading /usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/lang/String.class)]
[checking bismillah_terminal]
[loading /usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/lang/System.class)]
[loading /usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/io/PrintStream.class)]
[loading
/usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/io/FilterOutputStream.class)]
[loading /usr/local/java/jdk1.5.0/jre/lib/rt.jar(java/io/OutputStream.class)]
[wrote ./bismillah_terminal.class]
[total 606ms]
[root@nbwrylinux admin]#
```

=====

EXECUTE THE FOLLOWING 3 COMMANDS:

- (1) [root@nbwrylinux admin]# java -verbose ./bismillah_terminal
 - (2) [root@nbwrylinux admin]# java -help
 - (3) [root@nbwrylinux admin]# javac -help
- =====

INSTALL ECLIPSE C/C++ PLUGIN FOR UBUNTU (RUN C/C++)

I.E. TO ADD C/C++ PLUGIN INTO ECLIPSE

```
[root@nbwrylinux ~]# cd /home/admin/
[root@nbwrylinux admin]# ls
Exercise-2-Continued.txt  org.eclipse.cdt.sdk-2.1.1-linux.x86.zip  wry1
[root@nbwrylinux admin]#
```

UNZIP ECLIPSE CDT FOR LINUX

```
[root@nbwrylinux admin]# unzip org.eclipse.cdt.sdk-2.1.1-linux.x86.zip
....
....
inflating: eclipse/features/org.eclipse.cdt_2.1.1/eclipse_update_120.jpg
  creating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/
inflating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/license.html
inflating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/feature.properties
inflating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/eclipse_update_120.jpg
inflating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/cpl-v10.html
inflating: eclipse/features/org.eclipse.cdt.sdk_2.1.1/feature.xml
[root@nbwrylinux admin]#

[root@nbwrylinux admin]# ls
```

```
eclipse org.eclipse.cdt.sdk-2.1.1-linux.x86.zip Exercise-2-Continued.txt
wry1
[root@nbwrylinux admin]#
```

```
MOVE CONTENTS OF /home/admin/eclipse INTO CORRESPONDING DIRECTORY IN
/usr/local/java/eclipse/
```

```
-----
[root@nbwrylinux admin]# cd eclipse
[root@nbwrylinux eclipse]# ls
features plugins
[root@nbwrylinux eclipse]# mv ./features/* /usr/local/java/eclipse/features/
[root@nbwrylinux eclipse]# mv ./plugins/* /usr/local/java/eclipse/plugins/
[root@nbwrylinux eclipse]#
```

```
-----
ALHAMDULILLAH DONE INSTALLING C/C++ PLUGIN.
-----
```

```
GO TO ECLIPSE FOLDER, RUN eclipse (GREEN FILE) --> THEN WAIT
```

```
-----
[root@nbwrylinux eclipse]# cd /usr/local/java/eclipse
[root@nbwrylinux eclipse]# pwd
/usr/local/java/eclipse
[root@nbwrylinux eclipse]# ./eclipse
```

```
-----
ALHAMDULILLAH. ENJOY YOURSELVES. LOOK AT THE HELP FILE.
-----
```