

Fundamental Programming Structure

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First Java Program

Say Hello to World

```
import java.io.*;

public class Main {

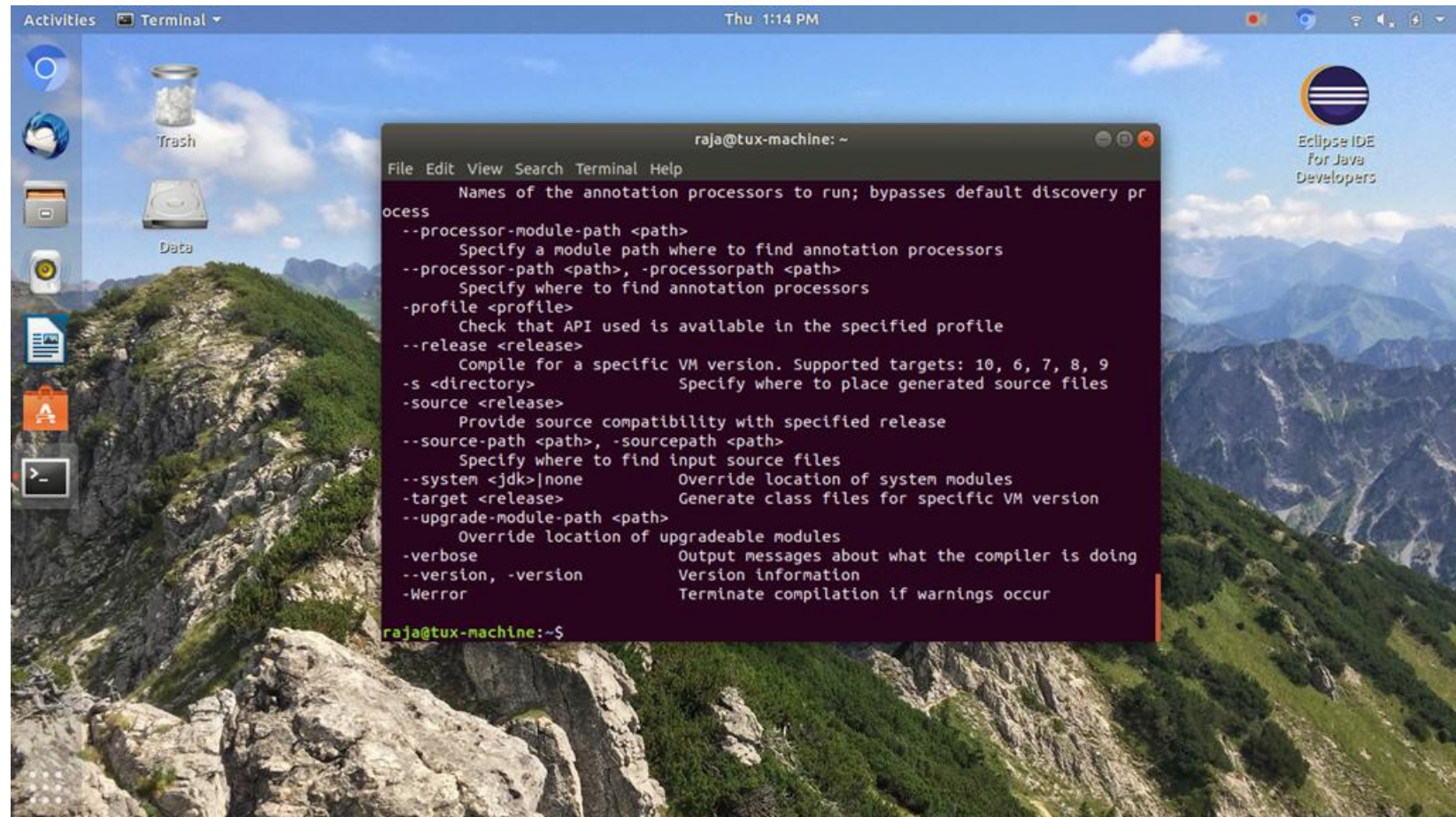
    public static void main(String[] args){

        System.out.println("Hello World");

    }

}
```

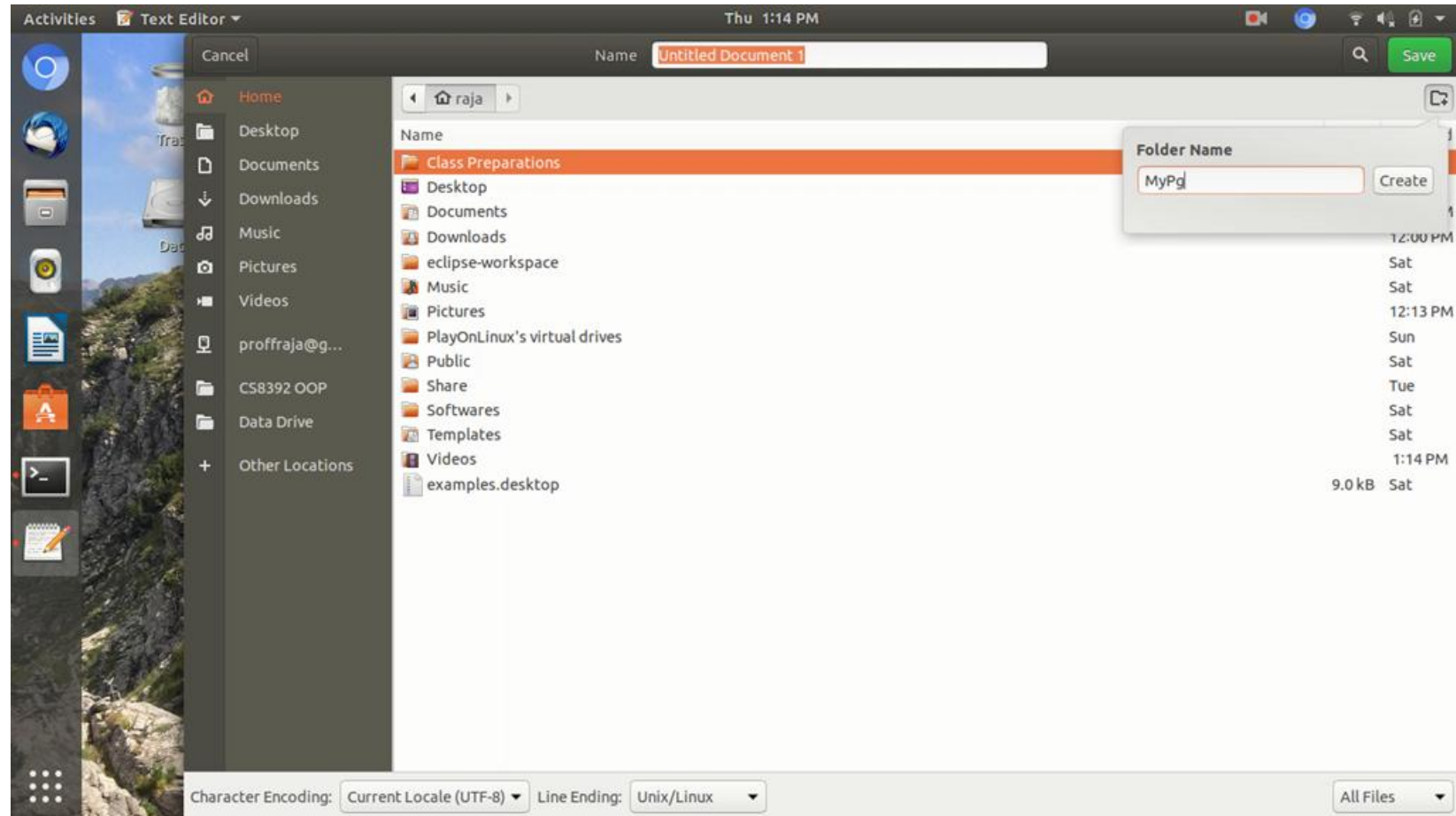
Checking for Java and Javac



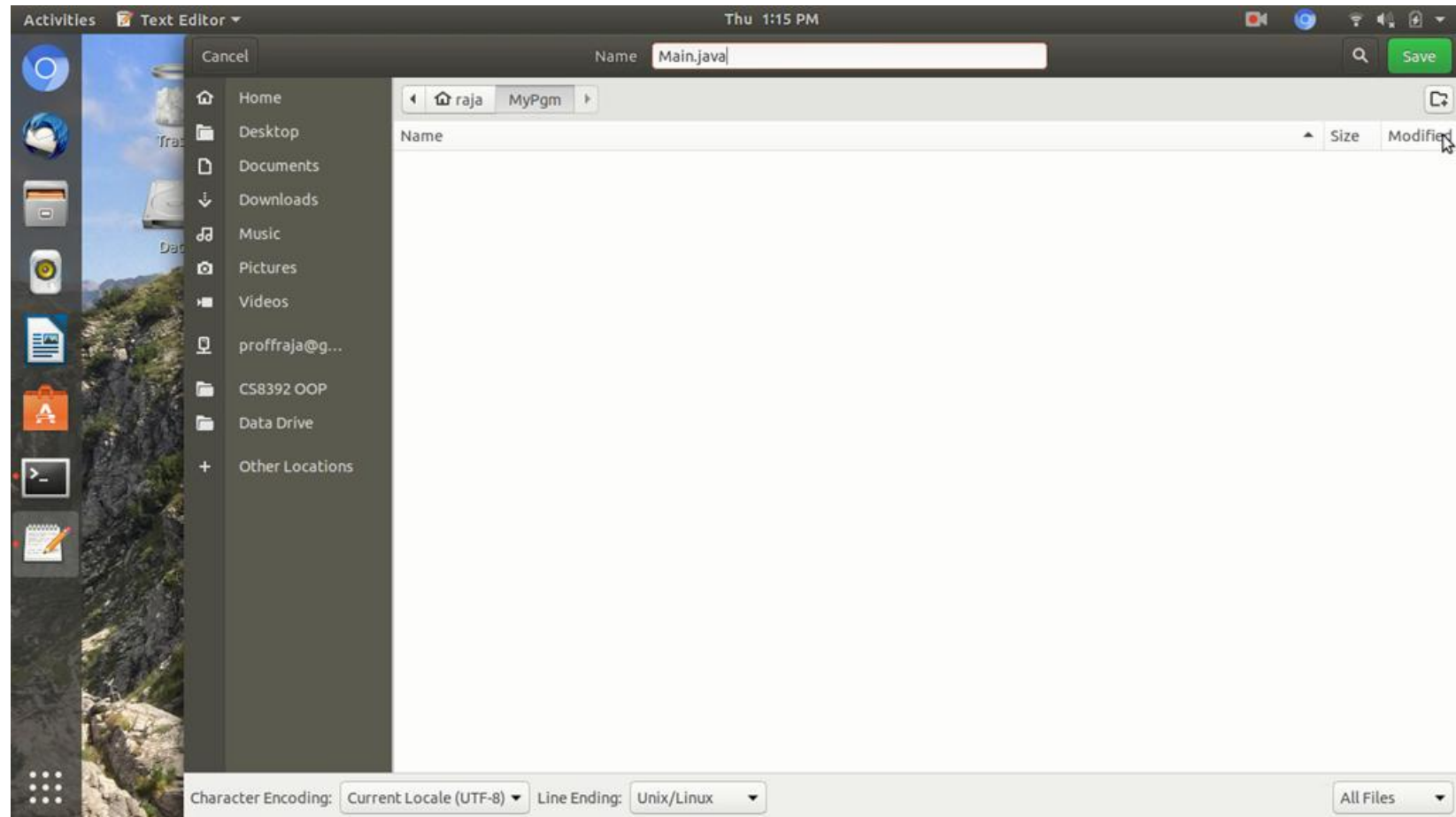
The screenshot shows a Linux desktop with a mountain landscape background. A terminal window is open, displaying the help text for the 'javac' command. The desktop includes a sidebar with application icons (Dash, Home, Files, Applications, Settings, etc.) and a top bar with system status and time (Thu 1:14 PM). The Eclipse IDE logo is visible in the top right corner.

```
raja@tux-machine: ~  
File Edit View Search Terminal Help  
Names of the annotation processors to run; bypasses default discovery process  
--processor-module-path <path> Specify a module path where to find annotation processors  
--processor-path <path>, -processorpath <path> Specify where to find annotation processors  
-profile <profile> Check that API used is available in the specified profile  
--release <release> Compile for a specific VM version. Supported targets: 10, 6, 7, 8, 9  
-s <directory> Specify where to place generated source files  
-source <release> Provide source compatibility with specified release  
--source-path <path>, -sourcepath <path> Specify where to find input source files  
--system <jdk>|none Override location of system modules  
-target <release> Generate class files for specific VM version  
--upgrade-module-path <path> Override location of upgradeable modules  
-verbose Output messages about what the compiler is doing  
--version, -version Version information  
-Werror Terminate compilation if warnings occur  
raja@tux-machine:~$
```

Creating Folders for My Program

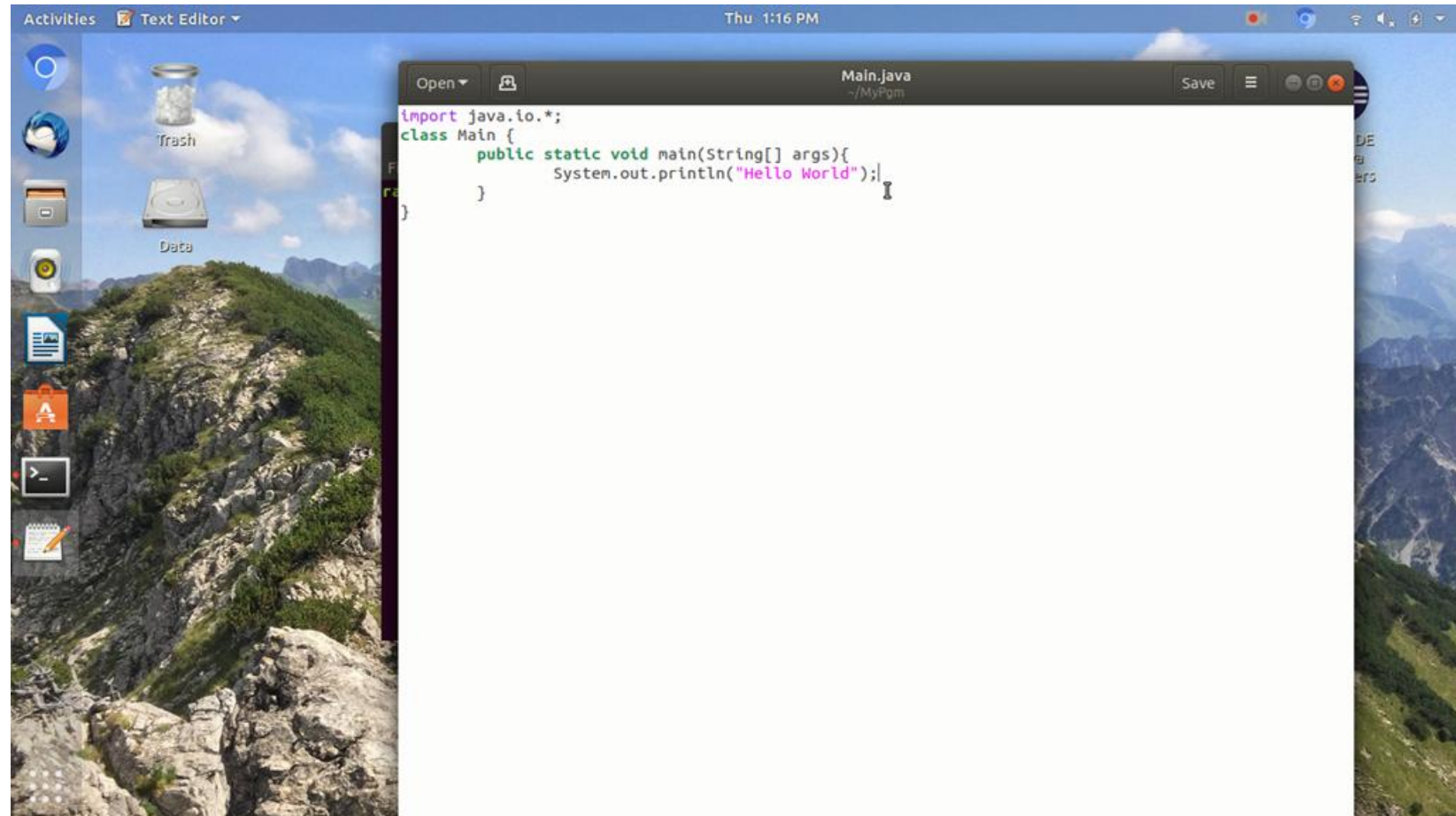


Saving File as Main.java

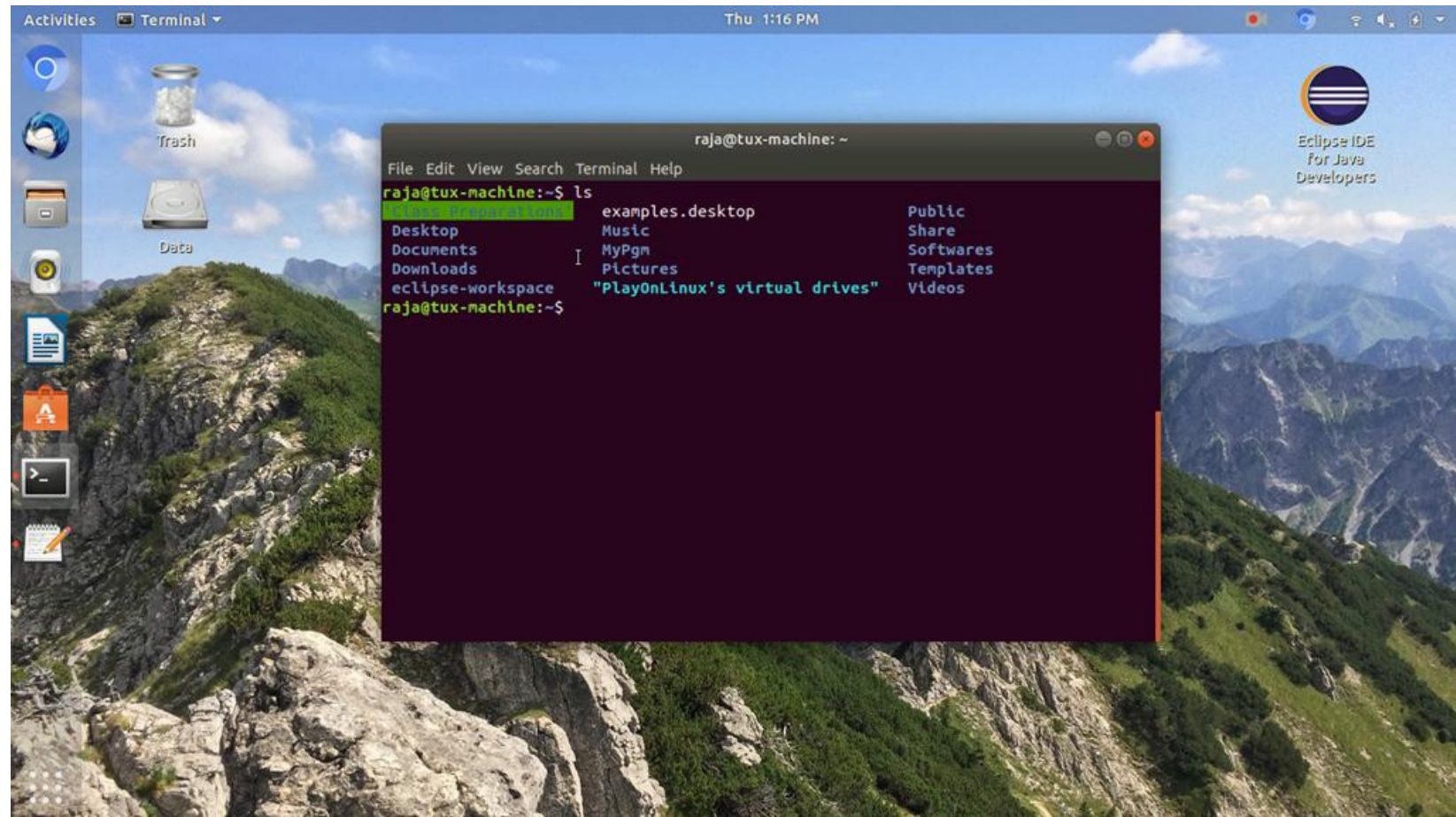


Rule 1: File name must resemble class name.

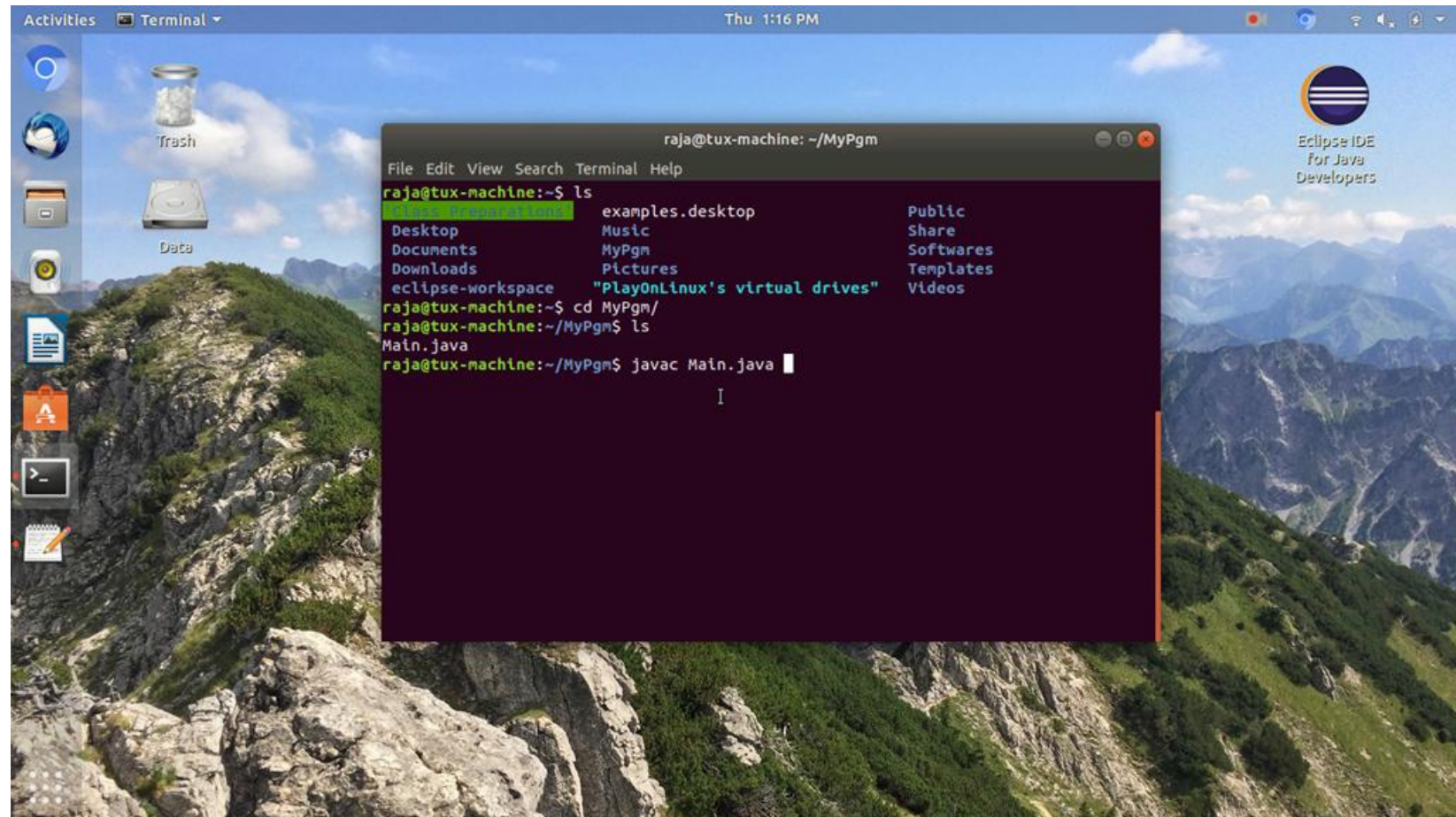
Creating Your First Program



Navigate to Your Program Folder



Compiling Main.java

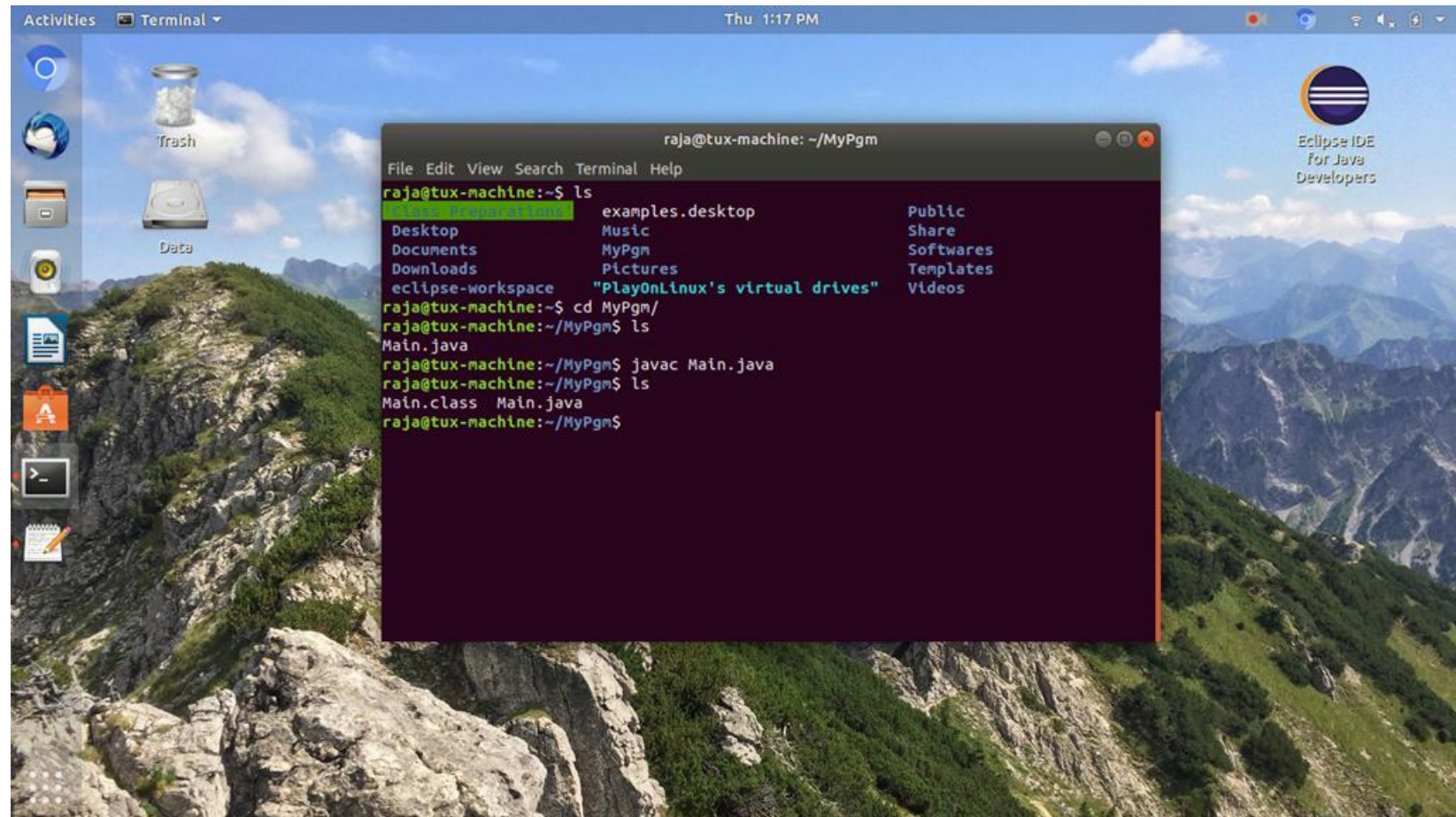


The screenshot shows a Linux desktop with a mountain landscape background. A terminal window is open, displaying the following commands and output:

```
raja@tux-machine: ~/MyPgm
File Edit View Search Terminal Help
raja@tux-machine:~$ ls
examples.desktop  Music  Public
Desktop           MyPgm  Share
Documents         Pictures Softwares
Downloads         "PlayOnLinux's virtual drives" Templates
eclipse-workspace Videos
raja@tux-machine:~$ cd MyPgm/
raja@tux-machine:~/MyPgm$ ls
Main.java
raja@tux-machine:~/MyPgm$ javac Main.java
```

`javac Main.java`

What is Main.class ?

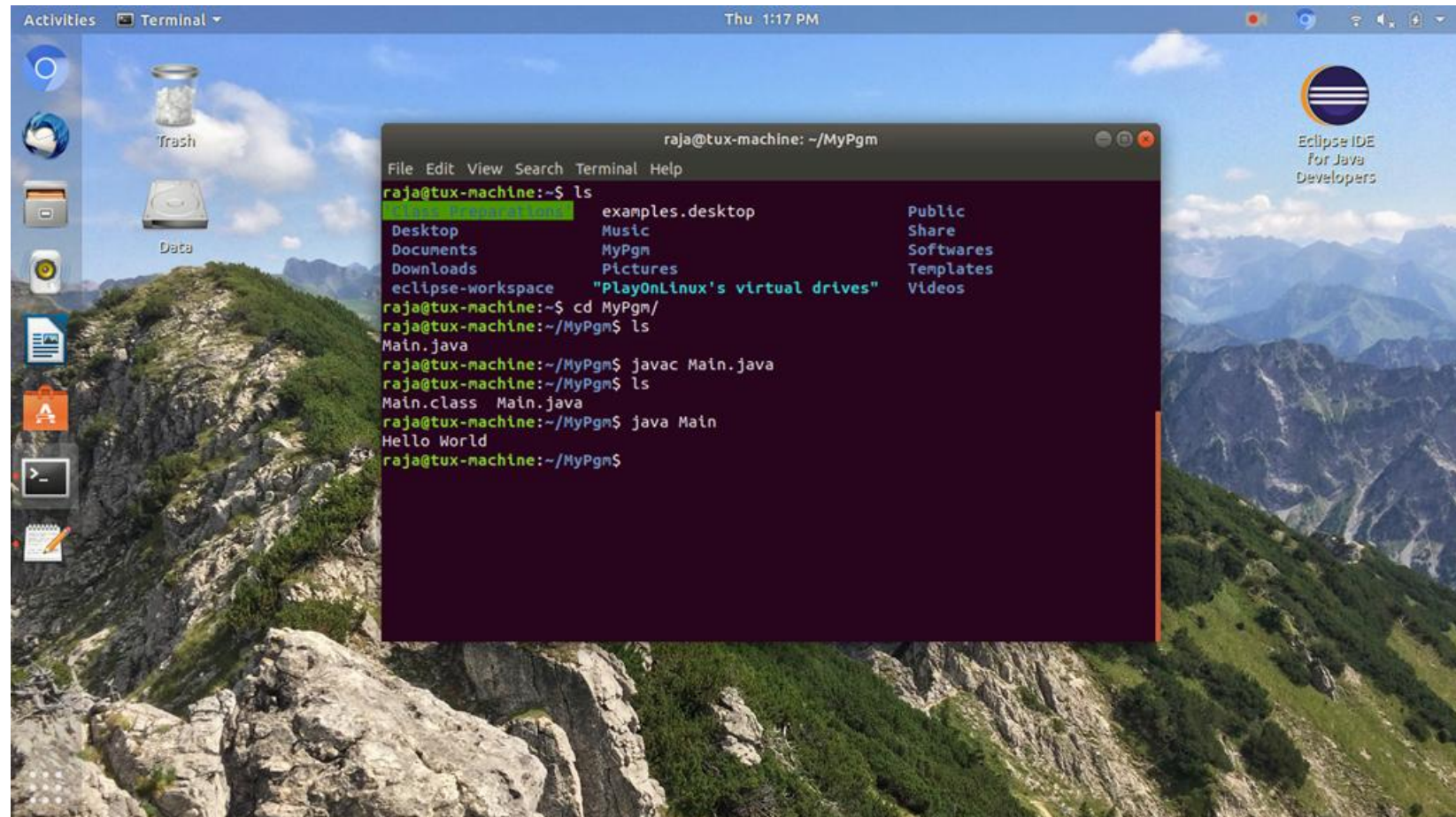


The screenshot shows a Linux desktop with a mountain landscape background. A terminal window is open, displaying the following commands and output:

```
raja@tux-machine: ~/MyPgm
File Edit View Search Terminal Help
raja@tux-machine:~$ ls
examples.desktop  Public
Desktop           Music            Share
Documents         MyPgm           Softwares
Downloads         Pictures        Templates
eclipse-workspace "PlayOnLinux's virtual drives" Videos
raja@tux-machine:~$ cd MyPgm/
raja@tux-machine:~/MyPgm$ ls
Main.java
raja@tux-machine:~/MyPgm$ javac Main.java
raja@tux-machine:~/MyPgm$ ls
Main.class Main.java
raja@tux-machine:~/MyPgm$
```

The terminal window title is "raja@tux-machine: ~/MyPgm". The desktop also shows icons for "Trash", "Data", and "Eclipse IDE for Java Developers".

Done



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```
raja@tux-machine: ~/MyPgm
File Edit View Search Terminal Help
raja@tux-machine:~$ ls
Desktop          examples.desktop  Public
Documents        Music             Share
Downloads        MyPgm            Softwares
eclipse-workspace Pictures          Templates
                  "PlayOnLinux's virtual drives"  Videos
raja@tux-machine:~$ cd MyPgm/
raja@tux-machine:~/MyPgm$ ls
Main.java
raja@tux-machine:~/MyPgm$ javac Main.java
raja@tux-machine:~/MyPgm$ ls
Main.class  Main.java
raja@tux-machine:~/MyPgm$ java Main
Hello World
raja@tux-machine:~/MyPgm$
```

java Main

Live Demo

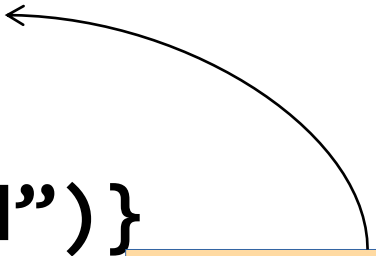
<https://youtu.be/rrrWZXbMuUw>

Java Comments

- It is a programmer-readable explanation or annotation in the source code of a computer program.
- It help's to understand the source code.
- It is ignored by compilers and interpreters.

How to Comment in Java?

```
import java.io.*;  
  
public class Main {  
  
    public static void main(String[] args){  
        //This will print hello world in console;  
  
        System.out.println("Hello World");  
    }  
}
```



Single Line Comment