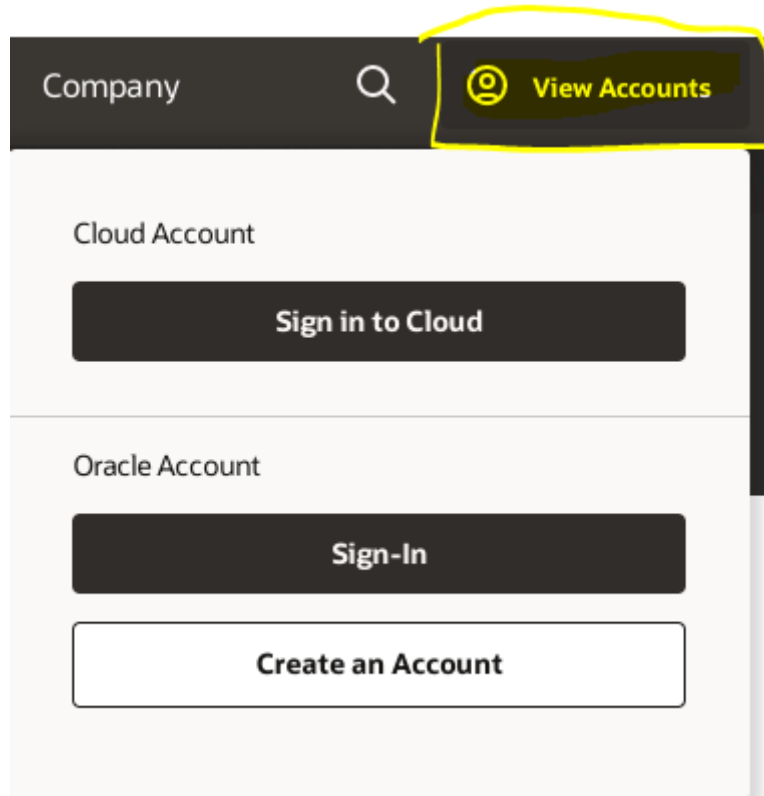


1. Download Java

- Go to <https://www.oracle.com/>
- Create a Oracle Account



- Download and Install Java
(under Products Menu, You can find Java Hardware and Software Section)
- Verify Java installation.
(in Command Prompt, type **Java** and see whether it displayed the list)

```

Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

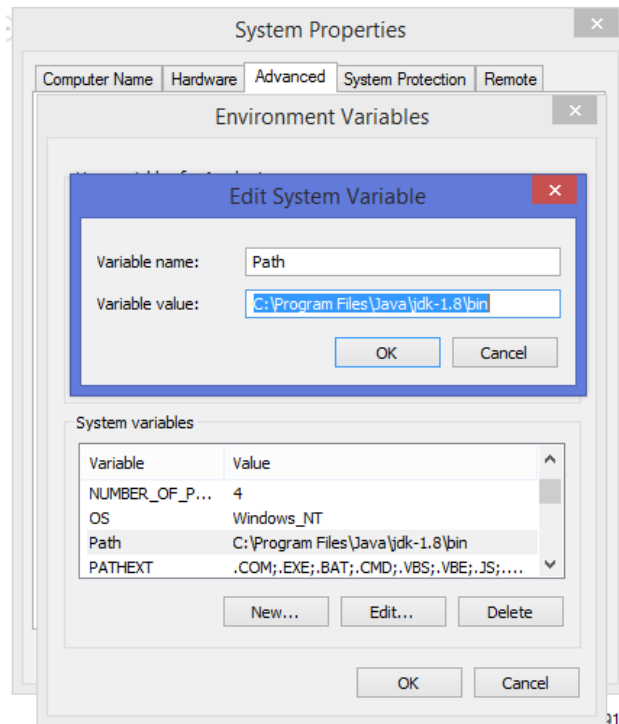
C:\Users\Academic>java
Usage: java [-options] class [args...]
           (to execute a class)
or java [-options] -jar jarfile [args...]
           (to execute a jar file)
where options include:
    -d32          use a 32-bit data model if available
    -d64          use a 64-bit data model if available
    -server       to select the "server" VM
                   The default VM is server.

    -cp <class search path of directories and zip/jar files>
    -classpath <class search path of directories and zip/jar files>
                  A ; separated list of directories, JAR archives,
                  and ZIP archives to search for class files.
    -D<name>=<value>
                  set a system property
    -verbose[:<classname>]
                  enable verbose output
    -version       print product version and exit
    -version:<value>
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  require the specified version to run
    -showversion   print product version and continue
    -jre-restrict-search ! -no-jre-restrict-search
                  Warning: this feature is deprecated and will be removed
                  in a future release.
                  include/exclude user private JREs in the version search
    -? -help       print this help message
    -X             print help on non-standard options
    -ea[:<packagename>...[:<classname>]]
    -enableassertions[:<packagename>...[:<classname>]]
                  enable assertions with specified granularity
    -da[:<packagename>...[:<classname>]]
    -disableassertions[:<packagename>...[:<classname>]]
                  disable assertions with specified granularity
    -esa ! -enablesystemassertions
    -dsa ! -disablesystemassertions
                  enable system assertions
                  disable system assertions
    -agentlib:<libname>[:<options>]
                  load native agent library <libname>, e.g. -agentlib:hprof
                  see also, -agentlib:jdwp=help and -agentlib:hprof=help
    -agentpath:<pathname>[:<options>]
                  load native agent library by full pathname
    -javaagent:<jarpath>[:<options>]
                  load Java programming language agent, see java.lang.instrument
                  package for details
    -splash:<imagepath>
                  show splash screen with specified image

See http://www.oracle.com/technetwork/java/javase/documentation/index.html for more details.
  
```

2. Setting the path

This PC → Properties → Environment Variables → [Copy the path to JDK bin folder]



3. First Java Program

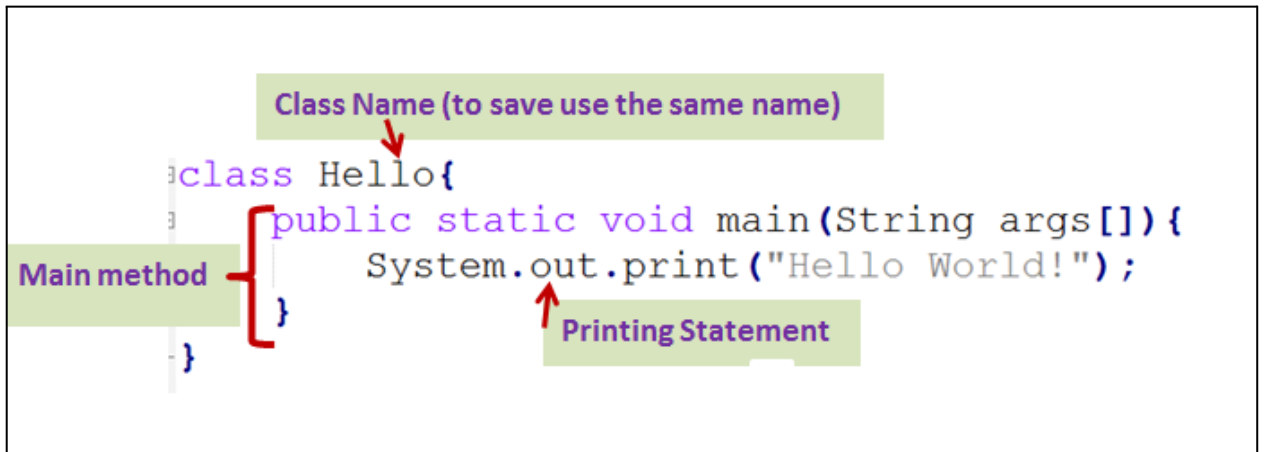
```
C:\Users\Academic\Desktop\JavaPro\Hello.java - Notepad++
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
Hello.java
1 class Hello{
2     public static void main(String args[]){
3         System.out.println("Hello World!");
4     }
5 }
6
7
```

- Type the above program.
- Save the program (**Hello.java**)
- Go the location of the program stored. (**cd desktop**)
- Compile the program (**javac Hello.java**)
- Run the program (**java Hello**)

```
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Users\Academic>cd desktop
C:\Users\Academic\Desktop>cd javapro
C:\Users\Academic\Desktop\JavaPro>javac Hello.java
C:\Users\Academic\Desktop\JavaPro>java Hello
Hello World!
C:\Users\Academic\Desktop\JavaPro>
```

Program Structure



System.out.println→with a line break

System.out.print→without a line break

Activity

- 1) Type a simple program to display your name.
- 2) Type a simple program to display your name and university in two lines.
- 3) Type the following program and get the output.

```
Total.java  
1 class Hello{  
2     public static void main(String args[]){  
3         int x=10;  
4         int y=20;  
5         System.out.print(x+y);  
6     }  
7 }  
8
```

- 4) Modify the above program to display other mathematical operations for x and y.
(Subtraction,Multiplication,Division,Modulus)
- 5) Declare the following variables in a program and display all.
Hint: System.out.println(myNum);

```
int myNum = 5;           // Integer (whole number)  
float myFloatNum = 5.99f; // Floating point number  
char myLetter = 'D';     // Character  
boolean myBool = true;   // Boolean  
String myText = "Hello"; // String
```

6) Code the following programs and fix errors.

```
class Welome{  
    public static void main(String args[]){  
        system.out.print("Welcome to World of Java");  
    }  
}
```

```
class Student{  
    public static void main(String args[]){  
        int studentName=Kavindu;  
        String marks=80;  
        System.out.println(studentName);  
        System.out.println(marks);  
    }  
}
```