

# **Content Beyond the Syallabus**

## **Experiment No.1**

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Q.Demonstrate the steps to install Java on Windows/Ubuntu and write a simple program to print the “Hello World!”

### **Theory:**

Step 1) Go to the link. Click on JDK Download for Java download JDK 8.

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Step 2) Next, Accept License Agreement Download Java 8 JDK for your version 32 bit or JDK download 64 bit. Download & Install Java JDK 8

Step 3) When you click on the Installation link the popup will be open. Click on I reviewed and accept the Oracle Technology Network License Agreement for Oracle Java SE development kit and you will be redirected to the login page. If you don't have an oracle account you can easily sign up by adding basic details of yours.

Download & Install the latest Java JDK

NOTE: You will be required to create an Oracle Account to start Java 8 download of the file.

Step 4) Once the Java JDK 8 download is complete, run the exe for install JDK. Click Next

Step 5) Select the PATH to install Java in Windows... You can leave it Default. Click next.

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NOTE: Follow the onscreen instructions in the succeeding steps to install Java 8 on Windows 10.

Step 6) Once you install Java in windows, click Close

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### How to set Environment Variables in Java: Path and Classpath

The PATH variable gives the location of executables like javac, java etc. It is possible to run a program without specifying the PATH but you will need to give full path of executable like C:\Program Files\Java\jdk1.8.0\_271\bin\javac A.java instead of simple javac A.java

The CLASSPATH variable gives the location of the Library Files.

Let's look into the steps to set the PATH and CLASSPATH

Step 1) Right Click on the My Computer and Select the properties

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Step 2) Click on advanced system settings

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Step 3) Click on Environment Variables to set Java runtime environment

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Step 4) Click on new Button of User variables

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Step 5) Type PATH in the Variable name.

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Step 6) Copy the path of bin folder which is installed in JDK folder.

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Step 7) Paste Path of bin folder in Variable value. Click on OK Button.

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Note: In case you already have a PATH variable created in your PC, edit the PATH variable to

PATH = <JDK installation directory>\bin;%PATH%;

Here, %PATH% appends the existing path variable to our new value

Step 8) You can follow a similar process to set CLASSPATH.

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Note: In case your java installation does not work after installation, change the classpath to

CLASSPATH = <JDK installation directory>\lib\tools.jar;

Step 9) Click on OK button

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Step 10) Go to the command prompt and type javac commands.

If you see a screen like below, Java is installed.

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### **Program Code:**

```
public static void main(String[]args){  
    system.out.println("Hello Word!");  
}
```

### **Program output:**

#### Output

```
java -cp /tmp/5wvfQ88KfE HelloWorld  
Hello, World!
```

### **Conclusion:**

Thus, we successfully installed the Java JDK and compiled a Hello World Program in the java compiler.