PROGRAMMING

Tutorial 1

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TODAY'S TOPICS

- MySecondTeacher
- Window's path setting
- Running a java program from a command prompt
- Running a java program using BlueJ

MYSECONDTEACHER (MST)

- Our inhouse learning platform
- We will post all the announcement, assignment, notes, etc., in the MST
- URL: https://www.mysecondteacher.com
- Login using your account
- Watch the videos in the MST
- Gain mastery in all the interactive videos weekly

HAVE YOU INSTALLED?

- JDK
- Blue J

PATH SETTING (WINDOWS)

- https://www.edureka.co/blog/set-Java-classpath/
- https://www.javatpoint.com/how-to-set-classpath-in-java

PATH SETTING (WINDOWS)

- Assuming you have installed Java in c:\Program Files\java\jdk directory –
  - Right-click on 'My Computer' and select 'Properties'.
  - Click Advanced System Setting
  - Click the 'Environment variables' button under the 'Advanced' tab.
  - Now, alter the 'Path' variable so that it also contains the path to the Java executable.
- Example, if the path is currently set to 'C:\WINDOWS\SYSTEM32', then change your path to following or click New and paste the below red line.
- 'C:\WINDOWS\SYSTEM32;**c:\Program Files\java\jdk\bin'**.
- OR Click New button and paste the above red line
- **Note: Don't delete the existing path, only add jdk path separated by semicolon (;)**

FIRST JAVA PROGRAM

- Create a folder called ‘myjava’
- Open notepad and write the following code and save it in that folder:

```
class MyFirstJavaProgram {

        public static void main(String[] args) {
                System.out.println("Hello World");
        }
}
```

RUNNING A JAVA PROGRAM USING COMMAND PROMPT

- Save the file as: **MyFirstJavaProgram.java**. *(File name is same as class name)*
- Open a command prompt window and go to the directory where you saved the class. Assume it's C:Users/User.
- Type **cd Desktop/myjava**
- Type **javac MyFirstJavaProgram.java** and press enter to compile your code. If there are no errors in your code, the command prompt will take you to the next line.
- Open the folder 'myjava' and you will see another new file called **MyFirstJavaProgram.class**, this file contains bytecode.
- Now, type **java MyFirstJavaProgram** to run your program.
- You will be able to see ' Hello World ' printed on the window.

SECOND JAVA PROGRAM

- Open notepad and write the following code and save it in 'myjava' folder:

```
class MySecondJavaProgram {

        public static void main(String[ ] args) {
                System.out.println("Hello,Second Program");
        }
}
```

RUNNING A MULTIPLE FILES USING COMMAND PROMPT

- Save the file as: MySecondJavaProgram.java. *(File name is same as class name)*
- Open a command prompt window and go to the directory where you saved the class. Assume it's C:\.
- Type 'javac ***.java**' and press enter to compile your code. If there are no errors in your code, the command prompt will take you to the next line.
- Now, type ' java MyFirstJavaProgram' to run your first program.
- Now, type ' java MySecondJavaProgram' to run your first program.
- You will be able to see ' Hello World ' printed on the window.
- You will also see two files with .class extension as a result of compilation.

FIRST JAVA PROGRAM USING BLUE J

- Open Blue J
- Click on Create New Project
- Click on Create New Class
- Input the class name as MyFirstJavaProgram
- Write the previous code in the editor
- Click compile to compile the java code
- Right click the class in orange box and then click void main (String[] args)
- The output will be displayed in another window.

FEW EXAMPLES

- Adding two integer numbers numbers:

```
class Addition{

	public static void main(String[] args) {
		int a = 10;
		int b = 20;
		int c = a + b;
		System.out.println("Sum is: "+c);
	}
}
```

FEW EXAMPLES

- Subtracting two floating point numbers:

```
class Subtraction{

	public static void main(String[] args) {
		float a = 10;
		float b = 20;
		float c = ?;
		System.out.println(”Result is: ”+c);
	}
}
```