main() ⇒ CTRL+SPACE and then enter >> main method shortcut to create it

First program: Write program to print your name

```
package basics;
public class Lecture_03_26Jul_01 {
        public static void main(String[] args) {
            System.out.println("Mangesh Sutar");
        }
}
```

Output - : Mangesh Sutar

What is difference between println and print

When we use println, control will move to next line When we use only print then control will remain on same line

Program 2;

```
package basics;
public class Lecture_03_26Jul_01PrintName {
    public static void main(String[] args) {
        System.out.print("Mangesh Sutar");
        System.out.print("Test");
    }
}
```

Output - Mangesh SutarTest

Note: in java, java execution is happened line by line

Example

```
package basics;
public class Lecture_03_26Jul_01PrintName {
    public static void main(String[] args) {
        System.out.println("Mangesh Sutar");
        System.out.println("Test");
```

```
System.out.println("Mangesh 2345");
}
```

Output -

Mangesh Sutar Test Mangesh 2345

How java internally work

	Compilation		iterpretation	
.java (Extension)			Execute Transalte .class into ss Binary	
human undersatndable langugae	Syntax Rules	.class (Extension)		binary file
		intermediate class		input
	compile time error	which is neither understandable by human nor OS	Run Time Error leads to an exception	os
				Output

Binary language is all about 0 and 1

Human understandable language is converted to binary language using two steps

- 1. Compilation
- 2. Interpretation

Compile time error occurs when we do not follow rules or we have done any syntax error .class file is intermediate class which is neither understandable by human nor OS Intermediate class is present in our system under /bin folder when we execute the .java file /src is the folder which is having all .java file

Interpretation read the line by line and if any error occurs that error is called as runtime error

Run Time Error leads to an exception

Example: inputMismatchException

JDK	Java Development Kit
JRE	Java Run time Environment
JVM	java Virtual machine
JIT	Just in time

JVM -

- stands for java virtual machine which is not present in our system physically, it is present virtually in nature
- JVM start the executing program starting from the main method
- It is responsible for executing the program line by line

JDK

- Stands for java development kit
- It will be having library file in it which will be responsible for the execution of program

JIT

- Stands for just in time
- Translating the class file into binary file