

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

### What is public static void main

Main method or any method consist of 5 things

1. Access specifier
2. Modifier
3. Return type
4. Method name
5. Parameterized / non parameterized

access specifier	public,private,protected,default/package
modifier	static and non static
return type	<b>void,byte,short,int ,long,float,double,char,boolean,String</b>
method name	can be anything like manish(), banaglore(), login(), logout(), registartion()
	method can be anything
Parameter/Non Parametrized	manish()->non parametzied method manish(int a)->parametrized method

### Main method details as below

```
public static void main(String[] args)
public-access specifier
static-modifier
void-return type
main->method name
String[] args-parametrized method
```

Can you change anything in your main method - **NO**

Any class can have any number of methods - **Yes**

Method consist of 5 things , while creating method we have to mention things as per requirement

Like if method is public then we should declare it as public and if same method is static then we should mention it as static method

If same method is non return type method and its not parameterized then accordingly we have to declare all the 5 things in it.

Above example -;

```
public static void test()  
{  
  
}
```

access specifier	Need to mention while creating method
private	private
protected	protected
public	public
default/package	No need to mention anything

modifier	Need to mention while creating method
static	static
non static	

return Type	Need to mention while creating method
void	
byte	Numeric value
short	
int	
long	
float	Decimal value
double	
char	A,Z,K,O

boolean	true,false
String	Word or Sentence Ex: Cityname, name,Countrypname,Address

**Check whether the below methods are valid or not and if valid then provide all the 5 things**

	valid method? Access specifier? Modifier? Return type? Method name Parameterized / non parameterized
<pre>public static void login() { }</pre>	valid public static void login non para
<pre>public static void login(String un) { }</pre>	Valid
<pre>public void logout() { }</pre>	valid
<pre>private void regustartion() { }</pre>	valid
<pre>void zoom_class() { }</pre>	valid
<pre>int height(int father_height) { }</pre>	valid default.package non static int

public static void login(String un,String pwd) {  }	Valid
String name() {  }	valid default.package non static

## How to call the static method inside the main method

Note : Every method must be present inside class and outside the main method body

```
package basics;
public class Lecture_04_29Jul_01_HowToCallStaticMethodInsideMainMethod {
    public static void StaticMethod()
    {
        System.out.println("Static method");
    }

    public static void main(String[] args) {
        System.out.println("Main method");
        // we can call the static method inside main method by using its name or
        classname.staticMethodName;

        StaticMethod();
    }
}
```

**Note** : we can call the static method inside main method by using its name or classname.staticMethodName;