

UNIT V(A) : INTRODUCTION TO JAVA

- Java is an **Object Oriented Programming language** , developed by **James Gosling** along with his associates at Sun Micro System (a software company),USA.
- Initially it was named **OAK**(a tree outside Gosling's office).

Java allows writing a program in 2 ways:

- **Java application or Standalone System**

It is a java program that is designed **to run on a computer without any help of a web browser.**

- **Java applet or Internet Applet**

It is a program written in Java language that can be **included in a web page in the same way as a picture or a clip included.**

Features of Java language:

- Java is **Object Oriented language.**
- It is platform independent.
- It uses compiler as well as interpreter.
- It is a robust language.
- It is case sensitive.

Note – Java Compiler enables a computer to execute a java program as well as program written in other language compiled into java byte code. This is the reason Java interpreter is said to be **Java Virtual Machine(JVM).**

Packages in JDK 1.5

java.lang	Supports classes containing String/Character, Math, Integer, Thread, etc.
java.io	Contains classes for supporting input and output statements.
java.applet	Contains classes to generate applets.
java.net	Contains classes for supporting networking operations.
java.awt	Contains classes for supporting abstract window tool kit and managing GUI (Graphic User Interface) components.
java.text	Provides classes for handling formatting of text, dates, numbers and messages.
java.math	Contains classes for supporting mathematical functions such as square roots (integer and decimal both).

Keywords or Reversed word

These are words that carry special meaning to the language compiler.

Some of the keywords used in programming are listed below.				
case	switch	else	break	static
do	const	throws	float	char
try	int	double	void	goto
for	while	new	import	boolean
long	if	byte	package	private
catch	short	public	class	default

- **Class Declaration** – It is the first line of the program .It uses a keyword class followed by a name called class name.
- **Main Function** – The main () function encloses the programming statement within opening and closing curly braces {} . As the main function is a part of class

declaration ,it is further enclosed within curly braces {} under class heading.

Output Statements in Java:

- **System.out.print()** : This statement is used to display the value enclosed within its braces .It leaves the cursor in the same line on the screen.

Input:

```
public class Example {  
    public static void main(String[] args) {  
        System.out.print("Hello, World!");  
        System.out.print("Hello, World!");  
    }  
}
```

Output:

```
Hello, World! Hello, World!
```

- **System.out.println()** : This statement displays the output of the program on the screen in the different lines .The letter 'ln' in the statement act as a line feed which directs the cursor to move to the next line.

Input:

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

Output:

```
Hello, World!  
Hello, World!
```

