



STEPPING STONE  
SCHOOL (HIGH)

**CLASS : IX**

**Subject: Computer Application**

**Date: 12/05/20**

**Topic: Conditional construct in java , Elementary Concept of Objects and Classes**

**Time Limit: 1 hour 30 minutes**

## **Worksheet No.:3**

**[Minutely go through all the topics given below.]**

**Features of java programming language :**

### **i) Object oriented**

Java is an objected oriented programming language. Everything in Java is an object. Object-oriented means we organize our software as a combination of different types of objects that incorporates both data and methods.

### **ii) Simple**

Java is designed to be easy to learn. If you understand the basic concept of OOP Java, it would be easy to master.

### **iii) Secure**

With Java's secure feature it enables to develop virus-free.

### **iv) Portable**

Java Byte code can be carried to any platform.

### **v) Robust**

Java makes an effort to eliminate error-prone situations by emphasizing mainly on compile time error checking and runtime checking.

### **vi) Multithreaded**

With Java's multithreaded feature it is possible to write programs that can perform many tasks simultaneously. This design feature allows the developers to construct interactive applications.

### **vii) Dynamic**

Java is considered to be more dynamic than C or C++ since it is designed to adapt to an evolving environment. Java programs can carry an extensive amount of run-time information that can be used to verify and resolve accesses to objects at run-time.

**Bytecode** : Java program is both compiled and interpreted. After user writes a program, first it is compiled, After compilation java program is converted in to an intermediate code which is known as byte code.

**JVM** : Full form of JVM is java virtual machine .it is also called java interpreter. It is used to convert byte code to machine code. JVM is a software that needs to be running on the computer where you want to execute your Java program. JVM takes the bytecode as input, converts it into the machine code of the specific platform it is running on and executes it

**Java reserved words** : java reserved words are also known as java keywords

.java keywords are those words which has a special meaning to the compiler. Keywords cannot be used as a variable name. E.g if , for , switch etc.

### **Two types of java Program**

- a) Stand alone program
- b) Internet Applet.

## Programming in java

1)

Input marks of any subject

if marks  $\geq 80$  then print "Grade A"

if marks  $\geq 60$  then print "Grade B"

if marks  $\geq 40$  then print "Grade C"

else print "Grade F"

### program

class check

```
{
    public static void main(int m)
    {
        if(m $\geq$ 80)
        {
            System.out.print("GRADE A");
        }
        else if(m $\geq$ 60)
        {
            System.out.print("GRADE B");
        }
        else if(m $\geq$ 40)
        {
            System.out.print("GRADE C");
        }
        else
        {
            System.out.print("GRADE F");
        }
    }
}
```

**Q 2)**

Write a program to input a number and check whether the number is positive or negative or zero.

```
class check
{
    public static void main(int t)
    {
        if(t>0)
        {
            System.out.print("POSITIVE NUMBER");
        }
        else if(t<0)
        {
            System.out.print("NEGATIVE NUMBER");
        }
        else
        {
            System.out.print("ZERO");
        }
    }
}
```