Java-

Basic Syntax-

public class HelloWorld{

public static void main(String[] args){

System.out.println("Hello World!");

}

}

Data Types-

1. boolean data type
2. byte data type
3. char data type
4. short data type
5. int data type
6. long data type
7. float data type
8. double data type

Variable Declaration-

```
int    width, height=5;
char   letter='C';
float  age, area;
double d;
```

Input Methods-

```java
import java.util.*;
public class ScannerClassExample1 {
    public static void main(String args[]){
        String s = "Hello, This is JavaTpoint.";
        //Create scanner Object and pass string in it
        Scanner scan = new Scanner(s);
        //Check if the scanner has a token
        System.out.println("Boolean Result: " + scan.hasNext());
        //Print the string
        System.out.println("String: " +scan.nextLine());
        scan.close();
        System.out.println("--------Enter Your Details-------- ");
        Scanner in = new Scanner(System.in);
        System.out.print("Enter your name: ");
        String name = in.next();
        System.out.println("Name: " + name);
        System.out.print("Enter your age: ");
        int i = in.nextInt();
        System.out.println("Age: " + i);
        System.out.print("Enter your salary: ");
        double d = in.nextDouble();
        System.out.println("Salary: " + d);
        in.close();
            }
            }
```

Conditional statements

If else-

if(condition){

Action…

}

else{

Action..

}

Loops-

While Loop-

```
class whileLoopDemo
{
   public static void main(String args[])
   {
      int x = 1;

      // Exit when x becomes greater than 4
      while (x <= 4)
      {
         System.out.println("Value of x:" + x);

         // Increment the value of x for
         // next iteration
         x++;
      }
   }
}
```


For loop-

```
class forLoopDemo
{
   public static void main(String args[])
   {
      // for loop begins when x=2
      // and runs till x <=4
      for (int x = 2; x <= 4; x++)
         System.out.println("Value of x:" + x);
   }
}
```

Do while loop-

```java
class dowhileloopDemo
{
    public static void main(String args[])
    {
        int x = 21;
        do
        {
            // The line will be printed even
            // if the condition is false
            System.out.println("Value of x:" + x);
            x++;
        }
        while (x < 20);
    }
}
```

Arrays-

```java
class Testarray{
public static void main(String args[]){
int a[]=new int[5];//declaration and instantiation
a[0]=10;//initialization
a[1]=20;
a[2]=70;
a[3]=40;
a[4]=50;
//traversing array
for(int i=0;i<a.length;i++)//length is the property of array
System.out.println(a[i]);
}
}
```

Vectors

```java
import java.io.*;
import java.util.*;

class VectorExample {

    public static void main(String[] args)
    {
        // Size of the
        // Vector
        int n = 5;

        // Declaring the Vector with
        // initial size n
        Vector<Integer> v = new Vector<Integer>(n);

        // Appending new elements at
        // the end of the vector
        for (int i = 1; i <= n; i++)
            v.add(i);

        // Printing elements
        System.out.println(v);

        // Remove element at index 3
        v.remove(3);

        // Displaying the vector
        // after deletion
        System.out.println(v);

        // Printing elements one by one
        for (int i = 0; i < v.size(); i++)
            System.out.print(v.get(i) + " ");
    }
}
```