## BASIC STATEMENTS:

### 1.

```
Import java.util.Scanner;
Public class Main {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      String name = sc.next();
      System.out.println(“Hello”);
      System.out.println(name);
   }
}
```

### 2.

```
Import java.util.Scanner;
Public class main {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      Int num = sc.nextInt();
      Double fnum = sc.nextDouble();
      System.out.println(num);
      System.out.printf(“%.2f”, fnum);
      Sc.close();
   }
}
```

### 3.

Import java.util.Scanner;

```
Public class main{
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      String a = sc.next();
      System.out.println(“May I know how to learn “ + a + “!!!...”);
      Sc.close();
   }
}
```

**4.**

```
Import java.util.Scanner;
Public class ExecuteStringStatement {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      String inputString = sc.nextLine();
      System.out.println(“Hai “ + inputString + “!    Welcome to
Programming Language...”);
   }
}
```

**5.**

```
Import java.util.Scanner;
Public class MathCalculations {
```

```
   Public static void main(String[] args) {
   Scanner sc = new Scanner(System.in);
      Double floatValue = sc.nextDouble();
      Int sqrtValue = sc.nextInt();
      Int base = sc.nextInt();
      Int power = sc.nextInt();
      System.out.println((int) Math.floor(floatValue));
      System.out.println((int) Math.ceil(floatValue));
      System.out.println((int) Math.sqrt(sqrtValue));
      System.out.println((int) Math.pow(base, power));
   }
}
```

**CONTROL STATEMENTS:**

**1.**

```
Import java.io.*;
Import java.util.*;
Import java.text.DecimalFormat;
Public class Solution {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      Int basicSalary = sc.nextInt();
      Double hra;
      Double da;
```

```
      If (basicSalary < 15000) {
         Hra = 0.15 * basicSalary;
         Da = 0.90 * basicSalary;
      } else {
         Hra = 5000;
         Da = 0.98 * basicSalary;
      }
      Double grossSalary = basicSalary + hra + da;
      DecimalFormat df = new DecimalFormat("0.00");
      System.out.println(df.format(grossSalary));
      Sc.close();
   }
}
```

**2.**

```
Import java.io.*;
Import java.util.*;
Public class Solution {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      String name = sc.nextLine();
      Int arrears = sc.nextInt();
      Int cgpa = sc.nextInt();
      System.out.println("Name of the Student:" + name + "");
      If ((arrears == 1 && cgpa > 70) || ((arrears == 1 || arrears == 2) && cgpa > 75)) {
         System.out.println(name + " is Eligible for Placement");
      } else {
```

```
        System.out.println(name + " is Not Eligible for Placement");
      }
      Sc.close();
   }
}
```

**3.**

```
Import java.io.*;
Import java.util.*;
Public class Solution {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      Int balance = sc.nextInt();
      Int processType = sc.nextInt();
      Int amount = 0;
      If (processType == 1 || processType == 2) {
         Amount = sc.nextInt();
      }
      Switch (processType) {
         Case 1:
            Balance += amount;
            System.out.println(balance);
            Break;
         Case 2:
            If (amount > balance) {
               System.out.println("Insufficient Balance");
            } else {
```

```
            Balance -= amount;
            System.out.println(balance);
          }
          Break;
        Default:
          System.out.println("Invalid Input");
          Break;
      }
      Sc.close();
   }
}
```

**4.**

```
Import java.util.Scanner;
Public class VowelConsonantChecker {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      Char ch = sc.next().charAt(0);
      If (!Character.isLetter(ch)) {
         System.out.println("Invalid Input");
      } else {
         Char c = Character.toUpperCase(ch);
         Switch © {
            Case 'A':
            Case 'E':
            Case 'I':
            Case 'O':
```

```
            Case ‘U’:
              System.out.println(“The Character “ + ch + “ is Vowel”);
              Break;
            Default:
              System.out.println(“The Character “ + ch + “ is Consonant”);
              Break;
        }
      }
      Sc.close();
   }
}
```

**5.**

```
Import java.util.Scanner;
Public class GradingSystem {
   Public static void main(String[] args) {
      Scanner sc = new Scanner(System.in);
      String name = sc.nextLine();
      Int mark1 = sc.nextInt();
      Int mark2 = sc.nextInt();
      Int mark3 = sc.nextInt();
      Int mark4 = sc.nextInt();
      Int mark5 = sc.nextInt();
      Int total = mark1 + mark2 + mark3 + mark4 + mark5;
      Double average = total / 5.0;
      String grade;
      If (average >= 90) {
```

```
            Grade = “A”;
        } else if (average >= 80) {
            Grade = “B”;
        } else if (average >= 70) {
            Grade = “C”;
        } else if (average >= 60) {
            Grade = “D”;
        } else {
            Grade = “Fail”;
        }
        System.out.println(“Name of the Student:” + name);
        System.out.println(“Total Mark:” + total);
        System.out.println(“Average Mark:” + average);
        System.out.println(“Grade Mark:” + grade);
        Sc.close();
    }
}
```