1.WRITE A JAVA PROGRAM TO PRINT HELLO WORLD

```
class helloworld
{
   public static void main(String[] args)
   {
      System.out.println("Hello world");
   }
}
```

OUTPUT:
Hello world

2.WRITE A JAVA PROGRAM FOR ADDITION

```
class Addition
{
   public static void main(String[] args)
   {
      System.out.println("hello world");
      int a=10,b=20,c;
      c=a+b;
      System.out.println("output:"+c);

   }
}
```

OUTPUT:
output:30

3.WRITE A JAVA PROGRAM TO FIND ODD OR EVEN

```
import java.util.*;
class OddEven
{
   public static void main(String[] args)
   {
      System.out.print("Enter the number:");
      Scanner s= new Scanner(System.in);
      int n=s.nextInt();
      if(n%2==0)
      {
         System.out.println("The given number "+ n + " is even");
      }
      else
      {
```

```
            System.out.println("The given number "" + n + " is odd");
        }
    }
}
```

OUTPUT:

```
Enter a number:10
The given number 10 is even
```

4.WRITE A JAVA PROGRAM TO CHECK LEAP YEAR OR NOT

```
import java.util.Scanner;
public class LeapYear {
  public static void main(String[] args){
    int year;
    System.out.println("Enter an Year : ");
    Scanner sc = new Scanner(System.in);
    year = sc.nextInt();

    if (((year % 4 == 0) && (year % 100!= 0)) || (year%400 == 0))
      System.out.println("Leap year");
    else
      System.out.println("Not a Leap year");
  }
}
```

OUTPUT:

```
Enter an Year:2000
Leap year
```

5.WRITE A JAVA PROGRAM TO CHECK ELIGIBLE TO VOTE OR NOT

```
import java.util.Scanner;
public class Voting {
  public static void main(String[] args){
    int age;
    System.out.println("Enter your age : ");
    Scanner sc = new Scanner(System.in);
    age = sc.nextInt();

    if (age>=18)
      System.out.println("Eligible for vote");
    else
      System.out.println("Not Eligible for vote");
  }
}
```

OUTPUT:

```
Enter your age :20
Eligible for vote
```

6.WRITE A JAVA PROGRAM TO CHECK POSITIVE OR NEGATIVE

```
import java.util.Scanner;
public class Voting {
  public static void main(String[] args){
    int num;
    System.out.println("Enter a num : ");
    Scanner sc = new Scanner(System.in);
    num = sc.nextInt();

    if (num>=18)
      System.out.println("Positive");
    else if( num==0)
      System.out.println("Neutral num");
    else
      System.out.println("Negative");
  }
}
```

OUTPUT:

```
Enter a num :10
Positive
```

7.WRITE A JAVA PROGRAM TO PRINT SUM OF SERIES

```
import java.util.Scanner;
public class SumOfSeries{
  public static void main(String[] args){
    int num,sum=0;
    System.out.println("Enter a num : ");
    Scanner sc = new Scanner(System.in);
    num = sc.nextInt();
    for(int i=0;i<=num;i++)
    {
       sum=sum+i;
    }
    System.out.print("Sum is:"+ sum);

  }
}
```

OUTPUT:

```
Enter a num : 10
Sum is:55
```

8.WRITE A JAVA PROGRAM TO CALCULATE SIMPLE INTEREST

```
import java.util.Scanner;
public class simpleintrest
```

```
{
        public static void main(String[] args)
        {
                System.out.println("enter the values for P,T,R:");
                Scanner sc=new Scanner(System.in);
                float P=sc.nextFloat();
                float T=sc.nextFloat();
                float R=sc.nextFloat();
                float SI = (P * T * R) / 100;
                System.out.println("Simple interest = " + SI);

                }

}
```

OUTPUT:
enter the values for P,T,R:
2000
2
2
Simple interest = 80.0

9.WRITE A JAVA PROGRAM FOR FIBONACCI SERIES

```
class Fibonacci {
  public static void main(String[] args) {

    int n = 10, firstTerm = 0, secondTerm = 1;
    System.out.println("Fibonacci Series till " + n + " terms:");

    for (int i = 1; i <= n; ++i) {
      System.out.print(firstTerm + ", ");

      // compute the next term
      int nextTerm = firstTerm + secondTerm;
      firstTerm = secondTerm;
      secondTerm = nextTerm;
    }
  }
}
```

OUTPUT:
Fibonacci Series till 10 terms:
0, 1, 1, 2, 3, 5, 8, 13, 21, 34,

10.WRITE A JAVA PROGRAM TO CALCULATE FACTORIAL

```
class Factorial{
 public static void main(String args[]){
  int i,fact=1;
  int number=5;
  for(i=1;i<=number;i++){
      fact=fact*i;
  }
  System.out.println("Factorial of "+number +" is: "+fact);
 }
}
```

OUTPUT:
Factorial of 5 is 120

11.WRITE A JAVA PROGRAM TO CHECK PRIME OR NOT

```
import java.util.Scanner;

class Prime {
    public static void main(String[] args) {
        int num, i = 2; // Initialize i to 2
        boolean flag = false;
        Scanner sc = new Scanner(System.in);
        System.out.print("Enter a number: ");
        num = sc.nextInt();
        while (i <= num / 2) {
            if (num % i == 0) {
                flag = true;
                break;
            }
            ++i; // Added semicolon
        }
        if (!flag)
            System.out.println(num + " is a prime number.");
        else
            System.out.println(num + " is not a prime number.");
    }
}
```

OUTPUT:
Enter a number:11
11 is a prime

12.WRITE A JAVA PROGRAM TO PRINT COLLEGE

```
import java.util.Scanner;

public class clg {
    public static void main(String[] args) {
```

```
        System.out.println("Enter your department in CAPITALS: ");
        Scanner dep = new Scanner(System.in);
        String department = dep.nextLine();

        if (department.equals("CSE") || department.equals("AIDS") || department.equals("AIML") ||
            department.equals("ECE") || department.equals("CIVIL") || department.equals("MECH")) {
            System.out.println("SSE");
        } else if (department.equals("ARTS")) {
            System.out.println("SCLAS");
        } else if (department.equals("ARCHITECTURE")) {
            System.out.println("SCAD");
        } else {
            System.out.println("Please Enter correct DEP");
        }
    }
}
```

OUTPUT:
Enter your department in CAPITALS:CSE
SSE

13.WRITE A JAVA PROGRAM TO CHECK ARMSTRONG NUMBER OR NOT.

```
import java.util.*;

public class ArmstrongNum {

    public static void main(String[] args) {

        int originalNum, digit, cubeSum = 0, num;

        System.out.println("Enter the number:");
        Scanner s = new Scanner(System.in);
        num = s.nextInt();
        originalNum = num;
        while (num != 0) {
            digit = num % 10;
            cubeSum += Math.pow(digit, 3);
            num /= 10;
        }
        if (cubeSum == originalNum)
            System.out.println(originalNum + " is an Armstrong number");
        else
            System.out.println(originalNum + " is not an Armstrong number");
    }
}
```

OUTPUT:

Enter the number:
153
153 is an Armstrong number

```
import java.util.*;


public class POLINDROME {

            public static void main(String[] args)
            {

               System.out.print("Enter the user name:");
               Scanner input=new Scanner (System.in);
               String s1=input.nextLine();
               System.out.print("Reenter the user name:");
               String s2=input.nextLine();
               if (s1==s2)
               {
                   System.out.print("User name is valid");
               }
               else
               {
                   System.out.print("User name is invalid");
               }

            }
        }
```

14.WRITE A JAVA PROGRAM TO CALCULATE SIMPLE INTEREST

```
public class SimpleInterestCalculator {
   public static void main(String[] args) {
      Scanner scanner = new Scanner(System.in);

      System.out.print("Enter the principal amount: ");
      double principal = scanner.nextDouble();

      System.out.print("Enter the no of years: ");
      int years = scanner.nextInt();

      System.out.print("Is customer senior citizen (y/n): ");
      String isSenior = scanner.next();
```

```
        if (principal <= 0 || years <= 0) {
            System.out.println("Invalid input. Principal and years should be positive values.");
        } else {
            double rateOfInterest = isSenior.equalsIgnoreCase("y") ? 0.12 : 0.10;
            double interest = principal * rateOfInterest * years;

            System.out.println("Interest: " + interest);
        }
    }
}
```

WRITE A JAVA PROGRAM FOR DAYS CONVERTER

```
import java.util.Scanner;

public class DaysConverter {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);

        System.out.print("Enter the number of days: ");
        int totalDays = scanner.nextInt();

        if (totalDays < 0) {
            System.out.println("Invalid input. Number of days should be a non-negative integer.");
        } else {
            int years = totalDays / 365;
            int remainingDays = totalDays % 365;
            int weeks = remainingDays / 7;
            int days = remainingDays % 7;

            System.out.println("No. of years: " + years);
            System.out.println("No. of weeks: " + weeks);
            System.out.println("No. of days: " + days);
        }
    }
}
```