Assignment No 3

1. Write program to find whether a given year is a leap year or not.

```
Program -
package com.edubridge.assignment3;
import java.util.Scanner;
public class LeapYear
{
     public static void main(String[] args)
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           int year;
           System.out.println("Enter Any Year");
           year = sc.nextInt();
           if(year%4==0 && year%100!=0)
           {
                 System.out.println(year+ " is a Leap Year");
           }
           else
           {
                 System.out.println(year+ " is not a Leap Year");
           }
     }
}
```

2. Program to read roll no, name and marks of three subjects and calculate the total, percentage and division

```
Program -
package com.edubridge.assignment3;
import java.util.Scanner;
public class PercentageCalculator
{
     public static void main(String[] args)
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           System.out.println("Enter the Roll No of Student :");
           int rollno = sc.nextInt();
           System.out.println("Enter the Name of the Student :");
           String name = sc.next();
           System.out.println("Enter the Marks of Physics,
           Chemistry, Computer Application :");
           int phy = sc.nextInt();
           int che = sc.nextInt();
```

```
int comapp = sc.nextInt();
          System.out.println("----");
          System.out.println("Roll Number:" +rollno);
          System.out.println("Name of Student:" +name);
          System.out.println("Marks in Physics "+phy+" \nMarks in
          Chemistry " +che+ " \nMarks in Computer Application
           "+comapp);
          float total, percentage;
          String division;
          total = phy+che+comapp;
          percentage = total/300*100;
          System.out.println("Total Marks = " +total);
          System.out.println("Percentage = " +percentage);
          if(percentage>75)
                System.out.println("Division : Distinction");
          else if(percentage>=60)
                System.out.println("Division : First Class");
           }
          else if(percentage<60)</pre>
                System.out.println("Division : Second Class");
           }
          else
          {
                System.out.println("Failed");
           }
     }
}
```

3. Program to read temperature in centigrade and display a suitable message.

```
program -

package com.edubridge.assignment3;

import java.util.Scanner;
public class Temperature
{
    public static void main(String[] args)
    {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter Temperature");
        int temp = sc.nextInt();
        String a;
        String s="";
        if(temp<0)</pre>
```

```
{
    s = "Freezing";
}
else if(temp>=21 && temp<=30)
{
    s = "Normal";
}
else if(temp>=31 && temp<=40)
{
    s = "Hot";
}
else
{
    s = "Very Hot";
}
System.out.println("Weather " +s);
}</pre>
```

4. Program to check whether a character is an alphabet, digit or special character.

```
Program -
package com.edubridge.assignment3;
import java.util.Scanner;
public class CheckingAlphaNum
     public static void main(String[] args)
     {
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           System.out.println("Enter Something :");
           char ch = sc.next().charAt(0);
           if(ch >= 'a' \&\& ch <='z' || ch >='A' \&\& ch <='z')
                 System.out.println(ch+ " is an Alphabet");
           else if(ch>='0' && ch<='9')
           {
                 System.out.println(ch+ " is an Number");
           }
           else
           {
                 System.out.println(ch+ " is a Special Character");
           }
     }
}
```

5. Write a program in to accept a grade and declare the equivalent description

Grade	Description
E	Excellent
V	Very Good
G	Good
Α	Average
F	Fail

Test Data:

Input the grade :A

Expected Output: You have chosen: Average

```
Program -
package com.edubridge.assignment3;
import java.util.Scanner;
public class Grade
     public static void main(String[] args)
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           System.out.println("Enter Grade : ");
           char grade = sc.next().charAt(0);
           switch (grade)
           {
           case 'A', 'a':
         System.out.println("Average");
           break;
           case 'G', 'g':
           System.out.println("Good");
           break;
           case 'V', 'v':
           System.out.println("Very Good");
           break;
           case 'E', 'e':
           System.out.println("EXcellent ");
           break;
           case 'F', 'f':
           System.out.println("Fail");
```

```
break;
    default:
        System.out.println("Inavlid Input");
     }
}
```

6. Write a program to read any day number in integer and display day name in the word.

```
Program -
package com.edubridge.assignment3;
import java.util.Scanner;
public class NumberDay
{
     public static void main(String[] args)
     {
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           System.out.println("Enter Day In Number : ");
           int Numday = sc.nextInt();
           switch(Numday)
           {
                 case 1 : System.out.print("Sunday");
                 break;
                 case 2 : System.out.print("Monday");
                 break;
                 case 3 : System.out.print("Tueday");
                 break;
                 case 4 : System.out.print("Wednesday");
                 break;
                 case 5 : System.out.println("Thursday");
                 break;
                 case 6: System.out.println("Friday");
                 break;
                 case 7: System.out.println("Saturday");
                 break;
                 default:
                 System.out.println("enter valid number from 1 to 7");
           }
     }
}
```

7. Read integer value and display the number of days for this month

```
Program -
package com.edubridge.assignment3;
```

```
import java.util.Scanner;
public class NoOfDays
     public static void main(String[] args)
           // TODO Auto-generated method stub
           Scanner <u>sc</u> = new Scanner(System.in);
           int month;
           System.out.println("Enter Month in Number[1 - 12] :");
           month = sc.nextInt();
           if(month==1)
           {
                System.out.println("Its January 31 Days");
           else if(month==2)
                System.out.println("Its February 29 Days");
           else if(month==3)
                System.out.println("Its March 31 Days");
           else if(month==4)
                System.out.println("Its April 30 Days");
           else if(month==5)
                System.out.println("Its May 31 Days");
           else if(month==6)
                System.out.println("Its June 30 Days");
           else if(month==7)
                System.out.println("Its July 31 Days");
           else if(month==8)
                System.out.println("Its August 31 Days");
           else if(month==9)
           {
                System.out.println("Its September 30 Days");
           else if(month==10)
                System.out.println("Its October 31 Days");
           }
```