

Assignment-3

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

```
package com.java1;  
  
import java.util.Scanner;  
  
public class Leapyear {  
    public static void main(String[] args) {  
        Scanner sc = new Scanner(System.in);  
        System.out.println("Enter the year");  
        int year = sc.nextInt();  
  
        if(year%4==0 && year%100!=0 || year%400==0)  
        {  
            System.out.println("Leapyear");  
        }  
        else {  
            System.out.println("not a Leapyear");  
        }  
    }  
}
```

Output:

```
Enter the year  
2004  
Leapyear
```

2. program to read roll no, name and marks of three subjects and calculate the total, percentage and division
Test Data :
Input the Roll Number of the student :784
Input the Name of the Student :James
Input the marks of Physics, Chemistry and Computer Application : 70 80 90
Expected Output :
Roll No : 784
Name of Student : James
Marks in Physics : 70
Marks in Chemistry : 80
Marks in Computer Application : 90
Total Marks = 240
Percentage = 80.00
Division = First

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```
import java.util.Scanner;

public class Marklist {

    public static void main(String[] args) {

        int n,total = 0,percentage,division;
        String s="";
        Scanner sc = new Scanner(System.in);
        System.out.println("Roll Number of the student");
        int Rollno = sc.nextInt();
        System.out.println("Enter the Student name");
        String Name = sc.next();
        System.out.println("Physics Mark-");
        int Marks = sc.nextInt();
        System.out.println("Chemistry Mark-");
        int Marks2 = sc.nextInt();
        System.out.println("Computer Application Mark-");
        int Marks3 = sc.nextInt();
        total=Marks+Marks2+Marks3;
        percentage = total/3;
        System.out.println("Total="+total);
        System.out.println("Percentage="+percentage);
        if(total>=200 && total<=300)
        {
            System.out.println("Division = FIRST");
        }
        else if(total>=100 && total<=199)
        {
            System.out.println("Division = SECOND");
        }
        else
        {
            System.out.println("Division = THIRD");
        }
    }
}
```

output

```
Roll Number of the student
784
Enter the Student name
James
Physics Mark-
70
Chemistry Mark-
80
Computer Application Mark-
90
Total=240
```

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Percentage=80
Division = FIRST

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

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

```
import java.util.Scanner;

public class Alphabet {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter any character : ");
        char ch = scanner.next().charAt(0);

        if((ch >= 'a' && ch <= 'z') || (ch >= 'A' && ch <=
'Z')) {

            System.out.println(ch + " is A ALPHABET.");

        } else if(ch >= '0' && ch <= '9') {

            System.out.println(ch + " is A DIGIT.");

        } else {

            System.out.println(ch + " is A SPECIAL
CHARACTER.");
        }

    }

}
```

Output

```
Enter any character :
+
+ is A SPECIAL CHARACTER.
```

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

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

Test Data :

Input the grade :A

Expected Output :

You have chosen : Average

Program:

```
import java.util.Scanner;

public class Grade {

    public static void main(String[] args) {
        char grade;
        System.out.println("Enter the Grade");
        Scanner scanner=new Scanner(System.in);
        grade=scanner.next().charAt(0);
        System.out.println("you have choosen:");
        switch (grade)
        {
            case 'E':
                System.out.println("Excellent");
                break;
            case 'V':
                System.out.println("Very Good");
                break;
            case 'G':
                System.out.println("Good");
                break;
            case 'A':
```

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```
        System.out.println("Average");
        break;
    case 'F':
        System.out.println("Fail");
        break;
    default:
        System.out.println("Invalid data, Enter Valid
data! ");
    }

}
```

Output

```
Enter the Grade
A
you have choosen:
Average
```

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

```
import java.util.Scanner;

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

        Scanner in = new Scanner(System.in);
        System.out.print("Input number: ");
        int day = in.nextInt();
        switch (day) {
            case 1:
                System.out.println("Monday");
                break;
            case 2:
                System.out.println("Tuesday");
                break;
            case 3:
                System.out.println("Wednesday");
                break;
            case 4:
                System.out.println("Thursday");
                break;
            case 5:
                System.out.println("Friday");
```

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```
        break;
    case 6:
        System.out.println("Saturday");
        break;
    case 7:
        System.out.println("Sunday");
        break;
    default:
        System.out.println("Sunday");
    }
}
```

Output

Input number: 5
Friday

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

Program

```
import java.util.Scanner;

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

        Scanner y = new Scanner(System.in);
        System.out.println("Enter the month");
        int month1 = y.nextInt();
        System.out.println("Enter the year");
        int year = y.nextInt();
        if((month1==2) && ((year%4==0) ||
((year%100==0)&&(year%400==0))))
            System.out.println("Number of days is 29");

        else if(month1==2)
            System.out.println("Number of days is 28");

        else if(month1==1 || month1==3 || month1==5 ||
month1==7 || month1==8 || month1==10 || month1==12)
            System.out.println("Number of days is 31");

        else
            System.out.println("Number of days is 30");

    }
}
```

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Enter the number

3

Enter the year

2001

Number of days is 31