

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

```
Import java.util.Scanner;

public class Leap
{
    public static void main(String[] args){
        //calculate the leap year
        int year;

        Scanner sc=new Scanner(System.in);
        System.out.println("enter the any year");
        year=sc.nextInt();
        if(year%4==0)//check condition for leap year
        {
            System.out.println("entered year is leap");//true condition
        }
        else
        {
            System.out.println("entered year is not leap");//else condition
        }
    }
}
```

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

```
import java.util.Scanner;

public class Program2 {

    public static void main(String[] args) {

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

        Scanner scanner = new Scanner(System.in);
        System.out.println("Roll No of Student :");
        int rollNo = scanner.nextInt();
        System.out.println("Name of The Student :");

        String studentName = scanner.next();
        System.out.println("marks of physics :");
        int physicsMarks = scanner.nextInt();
        System.out.println("marks of chemistry :");
        int chemistryMarks = scanner.nextInt();
        System.out.println("marks of computer Appplication :");
        int computerAppMarks = scanner.nextInt();
        double totalMarks = physicsMarks + chemistryMarks + computerAppMarks;

        double percentage = (totalMarks / 300) * 100;
        System.out.println("ROLL no : " + rollNo);
        System.out.println("Name Of Student : " + studentName);
        System.out.println("Marks in Physics : " + physicsMarks);
```

```

System.out.println("Marks in chemistry : " + chemistryMarks);
System.out.println("Marks in Computer Application: " + computerAppMarks);
System.out.println("Total Marks : " + totalMarks);
System.out.println(" Percentage : " + percentage);
if (percentage >= 80) {
System.out.println("Division = First");
} else if (percentage >= 60) {
System.out.println("Division = Second");
} else if (percentage >= 40) {
System.out.println("Division = Third ");
} else
System.out.println(" you are Falied !!");
}
}

```

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

```

import java.util.Scanner;

class Temp{

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

System.out.print("Enter the temperature: ");

int temp=sc.nextInt();

String s="";

if(temp<=0) s="Freezing ";
else if(temp>=21&&temp<=30) s="Normal ";
else if(temp>=31&&temp<=40) s="Hot ";
else if(temp>40) s="Very hot ";

System.out.println(s+ "weather.");

}

}

```

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

```
import java.util.Scanner;

public class Program4{

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Enter any caracter : ");
        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.");

        }

    }

}
```

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

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

```
import java.util.Scanner;

public class Program5

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

Scanner sc = new Scanner(System.in);

System.out.println(" enter your 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("Invalid Input");

}}

}

```

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

```

import java.util.Scanner;

public class Program6

{

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner sc = new Scanner(System.in);

        System.out.println("enter day number : ");

        int dayNum = sc.nextInt();

        switch (dayNum) {

            case 1:

                System.out.println("Sunday");

                break;

            case 2:

```

```

System.out.println("Monday");

break;

case 3:

System.out.println("Tuesday");

break;

case 4:

System.out.println("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("Invalid Input ,Please enter valid input from 1 to 7 ");

}

}}

```

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

```

import java.util.Scanner;

public class Program7 {

    public static void main(String[] args) {

        // TODO Auto-generated method stub

        Scanner sc = new Scanner(System.in);

        System.out.println("enter day number : ");

        int dayNum = sc.nextInt();
    }
}

```

```
switch (dayNum) { case 1:
System.out.println("31 days in january,march,may,july,august,october,december");
break;
case 2:
System.out.println("28 days or 29 days in Feb");
break;
case 3:

System.out.println("30 days in april,june,september,november");
default:
System.err.println("Invalid Input ,Please check It ");
}
}
}
```