
ASSIGNMENT – 3

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) {

        Scanner obj = new Scanner(System.in);

        System.out.println("Enter the year:");

        int year = obj.nextInt();

        if((year%4==0) || (year%400==0) || ((year%100==0)&&(year%2400==0200))) {

            System.out.println("Yeah! ,its Leap Year");

        } else {

            System.out.println("No!, its not a leap year");

        }

    }

}
```

Output:

Enter the year:

2022

No!, its not a leap year

Enter the year:

2000

Yeah! ,its Leap Year

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

PROGRAM:

```
import java.util.Scanner;
```

```
public class Studentmarks {
```

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

```
        String sname;
```

```
        int rollno;
```

```
        int phy,chem,ca;
```

```
        int total;
```

```
        int per;
```

```
        Scanner obj=new Scanner(System.in);
```

```
        System.out.println("Input the rollnumber of the student: ");
```

```
        rollno=obj.nextInt();
```

```
        System.out.println("Name of the student:");
```

```
        sname= obj.next();
```

```
        System.out.println("Marks in physics: ");
```

```
        phy=obj.nextInt();
```

```
        System.out.println("Marks in Chemistry: ");
```

```

        chem=obj.nextInt();
        System.out.println("Marks in computer application ");
        ca=obj.nextInt();
        total=phy+chem+ca;
        System.out.println("Total Mark="+total);
        per=total * 100/300;
        System.out.println("percentage="+per);
        if(per>=80) {
            System.out.println("Division = First");
        }

    }

}

```

OUTPUT:

Input the rollnumber of the student:

784

Name of the student:

James

Marks in physics:

70

Marks in Chemistry:

80

Marks in computer application

90

Total Mark=240

percentage=80

Division = First

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

```

import java.util.Scanner;

public class temperature{

public static void main (String[] args)

{

Scanner sc=new Scanner (System.in);

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

int Temp= sc.nextInt();

if(temp<0)

System.out.println("Freezing weather");

else if(temp>=10 && temp<20)

System.out.println("very cold weather");

else if(temp>=20 && temp<30)

System.out.println("Normal Temperature");

else if(temp>=30 && temp<40)

System.out.println(" Its Hot ");

else if(tem>=40 )

System.out.println(" Its very Hot ");

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

}

}

```

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

PROGRAM:

```

import java.util.*;

public class Check {

public static void main(String[] args)

{

Scanner obj = new Scanner(System.in);

System.out.println("Enter the Character:");

```

```

char charac = obj.next().charAt(0);
if((charac>='0') && (charac<='9'))
{
System.out.println("Given charcter is number");
}
else if(((charac>='A')&&(charac<='Z')) || ((charac>='a')&&(charac<='z')))
{
System.out.println("Given charcter is Alphabet");
}
else
System.out.println("Given charcter is Symbol");
}

```

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

PROGRAM:

```

import java.util.Scanner;

public class Grade
{

    public static void main(String[] args)
    {
        Scanner obj = new Scanner(System.in);
        System.out.println("Enter the Grade Obtained");
        char check = obj.next().charAt(0);
        switch(check)
        {
            case 'E':
                System.out.println("Excellent");
                break;

```

```

case 'V':
System.out.println("Very Good");
break;
case 'G':
System.out.println("Good");
break;
case 'A': System.out.println("Average");
break;
case 'F':
System.out.println("Fail");
break;
default :
System.out.println("Please! enter the valid grade");
}
}
}

```

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

Program:

```

import java.util.Scanner;

public class Day {

public static void main(String[] args) {

int option;

System.out.println("Enter any day number between 1-7: ");

Scanner sc=new Scanner(System.in);

option=sc.nextInt();

switch(option)//1

{

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

7) program to read temperature in centigrade and display a suitable message

PROGRAM:

```
import java.util.Scanner;

public class Weathermessage {

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

```
int temp;

Scanner obj=new Scanner(System.in);

System.out.println("Enter the temperature in celsius: ");

temp=obj.nextInt();

if(temp<0)

{

    System.out.println("Freezing temperature");

}

else if((temp>=0)&&(temp<=10))

{

    System.out.println("Very cold weather ");

}

else if((temp>=10)&&(temp<=20))

{

    System.out.println(" cold weather ");

}

else if((temp>=20)&&(temp<=30))

{

    System.out.println(" Normal temperature ");

}

else if((temp>=30)&&(temp<=40))

{

    System.out.println(" Its hot ");

}

else

{

    System.out.println(" Its very hot ");

}

}
```

OUTPUT:

Enter the temperature in celsius:

40

Its hot

Enter the temperature in celsius:

-4

Freezing temperature