

Assignment 3

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

Ans:

```
2. package assignment;
3. import java.util.Scanner;
4. public class Add {
5.     public static void main(String[] args)
6.     {
7.         Scanner scan=new Scanner(System.in);
8.         System.out.println("enter the year:");
9.         int year=scan.nextInt();
10.        if((year%400==0) || (year%4==0)&&((year%100!=
11.        0))) {
12.            System.out.println("leap year:" +year);
13.        }
14.        else
15.        {
16.            System.out.println("Not a leap year:"+
17.            year);
18.        }
19.    }
20. }
```

Output:

```
enter the year:
2012
leap year:2012
```

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

Ans:

```
_____package assignment;

import java.util.Scanner;

public class Marks {

public static void main(String[] args){

Scanner scan=new Scanner(System.in);

System.out.println("Enter the roll number:");

int Rnum=scan.nextInt();

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

String sName=scan.next();

System.out.println("Enter physics mark:");
```

```
int phyMark=scan.nextInt();
System.out.println("enter chemistry mark:");
int cheMark=scan.nextInt();
System.out.println("enter com app mark:");
int comappMark=scan.nextInt();
int total=phyMark +cheMark+comappMark;
int percentage=total/3;
System.out.println(" Roll No:" + Rnum);
System.out.println("Name of Student: "+sName);
System.out.println("Mark in physics:" +phyMark);
System.out.println("Mark in chemistry: "+cheMark);
System.out.println("Mark in computer Application:"
+comappMark);
System.out.println("Total Marks: "+total);
System.out.println("percentage:"+percentage);
System.out.println("Division=First");
}
}
```

Output:

Enter the roll number:

784

Enter the student Name:

```
James
Enter physics mark:
70
enter chemistry mark:
80
enter com app mark:
90
Roll No:784
Name of Student: James
Mark in physics:70
Mark in chemistry: 80
Mark in computer Application:90
Total Marks: 240
percentage:80
Division=First
```

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

Ans:

```
package assignment;
import java.util.Scanner;
public class Temperature {
```

```
public static void main(String[] args) {  
    String weather;  
    Scanner scan=new Scanner(System.in);  
    System.out.println("enter the temperature: ");  
    int temp=scan.nextInt();  
    if(temp<=0)  
        weather="freezing";  
    else if(temp>0 && temp<=30 )  
        weather="normal";  
    else if (temp>31&& temp<=40)  
        weather="Hot";  
    else  
        weather="very Hot";  
    System.out.println("weather condition: "+weather);  
}  
}
```

Output:

```
enter the temperature:  
-4  
weather condition: freezing
```

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

```
Ans: package assignment;

import java.util.Scanner;

public class Checkprgm {

public static void main(String[] args)

{

Scanner scan=new Scanner(System.in);

System.out.println("Enter the any character:");

char ch=scan.next().charAt(0);

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

System.out.println(ch + "is alphabet");

}

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

System.out.println(ch+ "is number");

}

else

{

System.out.println(ch+"is Spacial character:");

}

}

}
```

Output:

Enter the any character:

7

7is number

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

```
package assignment;

import java.util.Scanner;

public class GradeMark {

    public static void main(String[] args)
    {
        Scanner scan=new Scanner(System.in);
        System.out.print("Enter the GRADE E,V,G,A,F :");
        char ch=scan.next().charAt(0);
        switch(ch) {
            case 'E':
                System.out.println("Excellent");
                break;
            case 'V':
                System.out.println("Very goog");
```

```
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("invalid Grade");

}

}

}
```

Output:

```
Enter the GRADE E,V,G,A,F :E
Excellent
```


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

Ans:

```
package assignment;

import java.util.Scanner;

public class DisplayWord {

    public static void main(String[] args)

    {

        Scanner sc=new Scanner(System.in);

        System.out.println("Enter the number from 1 to 7:");

        int day_num=sc.nextInt();

        if(day_num==1) {

            System.out.println("Sunday");

        }

        else if(day_num==2) {

            System.out.println("Monday");

        }

        else if(day_num==3) {

            System.out.println("Tuesday");

        }

        else if(day_num==4) {
```

```
System.out.println("Wednesday");
}
else if(day_num==5) {
System.out.println("Thursday");
}
else if(day_num==6) {
System.out.println("Friday");
}
else if(day_num==7) {
System.out.println("Saturday");
} else {
System.out.println("Alowed numbers from 1 to 7
only");
}
}}
```

Output:

Enter the number from 1 to 7:

7

Saturday

7. Write a program to read any number of day in integer and display the day name in the number:

```
Ans: package assignment;

import java.util.Scanner;

public class Showmoth {

public static void main(String[] args)

{

Scanner sc=new Scanner(System.in);

System.out.println("Enter the month number from 1-
January to 12December");

int month=sc.nextInt();

String name="January";

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

int year=sc.nextInt();

switch(month)

{

case 1:

case 3:

case 5:

case 7:

case 8:

case 10:

case 12:
```

```
System.out.println("31 days in this month" +month
);
break;
case 4:
case 6:
case 9:
case 11:
System.out.println("30 days in this month of
"+month);
break;
case 2:
if((year%400==0) || ((year%4==0)&& (year%100!=0)))
{
System.out.println("leap year: "+year);
System.out.println("Only 29 days in a month");
}
else
{
System.out.println("Not a leap year"+year);
System.out.println("only 28 days in a month");
}
break;
```

```
default:

System.out.println("Please enter the number from 1
to 12 only ..!");

break;

}

} }
```

Output:

```
Enter the month number from 1-January to 12December
2
Enter the year:
```