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

Program:

Code:

```
import java.util.Scanner;
public class LeapYear {
public static void main(String[] args) {
// TODO Auto-generated method stub
int year;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter Year");
year=scanner.nextInt();
if(((year%4==0) && (year%100!=00)) || (year%400==0))
System.out.println("Entered year is Leap Year");
else
System.out.println("Entered year is not a leap year");
}
}
```

Output:

```
Enter Year
2024
Entered year is Leap Year
```

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

Code:

```
import java.util.Scanner;
public class TotalPercentageDivision {
public static void main(String[] args) {
// TODO Auto-generated method stub
int rollno,phyMarks,chemMarks,caMarks;
String studName;


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

```
System.out.println("Enter Student's Roll No. : ");
rollno=scanner.nextInt();

System.out.println("Enter student's Name : ");
studName=scanner.next();

System.out.println("Enter Physics Marks : ");
phyMarks=scanner.nextInt();
System.out.println("Enter Chemistry Marks : ");
chemMarks=scanner.nextInt();
System.out.println("Enter Computer Application Marks : ");
caMarks=scanner.nextInt();

float total=phyMarks+chemMarks+caMarks;
float percentage=(total*100)/300;

System.out.println("Roll No: "+rollno);
System.out.println("Name of student: "+studName);
System.out.println("Marks in Physics: "+phyMarks);
System.out.println("Marks in Chemistry: "+chemMarks);
System.out.println("Marks in Computer Application: "+caMarks);
System.out.println("Total Marks: "+total);
System.out.println("Percentage: "+percentage);

if(percentage>=60 && percentage<=100) {
System.out.println("Division: First");
}
else if (percentage>=50 && percentage<60) {
System.out.println("Division: Second");
}
else if (percentage>=40 && percentage<50) {
```

```
System.out.println("Division: Third");
}
else
System.out.println("Fail");
}
}
```

Output:

```
Enter Student's Roll No. :
784
Enter student's Name :
james
Enter Physics Marks :
70
Enter Chemistry Marks :
80
Enter Computer Application Marks :
90
Roll No: 784
Name of student: james
Marks in Physics: 70
Marks in Chemistry: 80
Marks in Computer Application: 90
Total Marks: 240.0
Percentage: 80.0
Division: First
```

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

Program:

Code:

```
import java.util.Scanner;
public class TemperatureInCentigrate {
public static void main(String[] args) {
```

```
// TODO Auto-generated method stub
int temp;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter temperature in Centigrade: ");
temp=scanner.nextInt();
if(temp<0)
System.out.println("Freezing weather.");
else if (temp<10)
System.out.println("Very cold weather.");
else if (temp<20)
System.out.println("Cold weather");
else if(temp<30)
System.out.println("Normal weather");
else if(temp<40)
System.out.println("Its Hot");
else
System.out.println("Its very hot");
}
}
```

Output:

```
Enter temperature in Centigrade:
26
Normal weather
```

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

program:package main.java;

Code:

```
import java.util.Scanner;
public class CheckingTheCharacter {
public static void main(String[] args) {
// TODO Auto-generated method stub
```

```
char ch;
System.out.println("Enter the Character: ");
Scanner scanner=new Scanner(System.in);
ch=scanner.next().charAt(0);
if ((ch>='a' && ch<='z')||(ch>='A' && ch<='Z'))
System.out.println("Entered Character is Alphabet.");
else if (ch>='0' && ch<='9')
System.out.println("Enterd character is digit.");
else
System.out.println("Enters Character is Special Character.");
}
}
```

Output:

```
Enter the Character:
55
Enterd character is digit.
```

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

Program:

Code:

```
import java.util.Scanner;
public class GradeBySwitchStatement {
public static void main(String[] args) {
// TODO Auto-generated method stub
String grade;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the grade : ");
grade=scanner.nextLine();
switch (grade) {
case "E":
System.out.println("Excelent");
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("invalid");
}
}
}
```

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

```
import java.util.Scanner;
public class DisplayDay {
public static void main(String[] args) {
// TODO Auto-generated method stub
int dayno;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter day number : ");
dayno=scanner.nextInt();
switch (dayno) {
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 No, Please enter nomber betweem 1 to 7");

}
}
}
```

Output:

```
Enter day number :
6
Saturday
```

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

Code:

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

```
public class NumberOfDaysMonth {
public static void main(String[] args) {
// TODO Auto-generated method stub
int num;
Scanner scanner=new Scanner(System.in);
System.out.println("Enter the number : ");
num=scanner.nextInt();
switch (num) {
case 1:
System.out.println("31 days in January");
break;
case 2:
System.out.println("28 days in February");
break;
case 3:
System.out.println("31 days in March");
break;
case 4:
System.out.println("30 days in April");
break;
case 5:
System.out.println("31 days in May");
break;
case 6:
System.out.println("30 days in June");

break;
case 7:
System.out.println("31 days in July");
break;
case 8:
```

```
System.out.println("31 days in August");
break;
case 9:
System.out.println("30 days in September");
break;
case 10:
System.out.println("31 days in October");
break;
case 11:
System.out.println("30 days in November");
break;
case 12:
System.out.println("31 days in December");
break;
default:
System.out.println("invalid No, Please enter nomber betweem 1 to 12");


}
}
}
```

Output:

```
Enter the number :
10
31 days in October
```