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

}

```
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
Е	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 Grades
{ 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("Inavlid 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 Week
public static void main(String[] args)
{
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("enter valid number from 1 to 7");
    }
    }}
   7. Read integer value and display the number of days for this month.
   /*public class Month* Java program to input month number and print number of days in that month
and month.
*/
import java.util.Scanner;
class Month
public static void main(String[] args)
```

```
{
  int month;
Scanner p=new Scanner(System.in);
  System.out.print("Enter month number (1-12): ");
  month=p.nextInt();
  if(month == 1)
  {
    System.out.println("JANUARY 31 days");
  }
  else if(month == 2)
  {
    System.out.println("FEBRUARY 28 or 29 days");
  }
  else if(month == 3)
    System.out.println("MARCH 31 days");
  }
else if(month == 4)
  {
    System.out.println("APRIL 30 days");
  }
  else if(month == 5)
  {
    System.out.println("MAY 31 days");
  }
  else if(month == 6)
  {
    System.out.println("JUNE 30 days");
```

```
}
  else if(month == 7)
  {
    System.out.println("JULY 31 days");
  }
  else if(month == 8)
  {
    System.out.println("AUGUST 31 days");
  }
  else if(month == 9)
  {
   System.out.println("SEPTEMBER 30 days");
  }
else if(month == 10)
  {
    System.out.println("OCTOBER 31 days");
  }
  else if(month == 11)
  {
    System.out.println("NOVEMBER 30 days");
  }
  else if(month == 12)
  {
    System.out.println("DECEMBER 31 days");
  }
  else
  {
    System.out.println("Invalid input! Please enter month number between (1-12).");
  }
```

}

}