\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*1) Peter wants to display the following menu when the Hangman game starts :

Play Game

View instructions

Exit Game

There after, he wants a user to enter a choice, such as 1,2 or 3. In addition, he wants the respective methods,

playGame(), instructGame(), exitGame(), to be invoked according to the user’s input, 1,2 or 3. Respectively. Help peter to achieve the preceding requirement.

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**package** hangmangame; //Package creation

**import** java.util.Scanner; //importing Scanner method

**public** **class** HangmanGame { //HangmanGame class creation

**public** **void** playGame() //method playGame

{

System.***out***.println("Play");

}

**public** **void** instructGame()//method instructGame

{

System.***out***.println(" Music");

System.***out***.println("ON Off");

}

**public** **void** exitGame() //method exitGame for exit a game

{

System.***out***.println("Exit");

}

**public** **static** **void** main(String[] args) { //main method for accessing above all methods

// **TODO** Auto-generated method stub

**int** a; //variable for choice in switch case

HangmanGame o1=**new** HangmanGame(); //object creation for accessing methods

System.***out***.println("Enter your first choice");

Scanner s1=**new** Scanner(System.***in***);//for user to give inputs

a=s1.nextInt(); //nextInt() which will internally works and takes the value of a here we didn't initialized so it goes to switch case

**switch**(a)

{

**case** 1:o1.playGame(); //these methods prints what is inside these methods

**break**;

**case** 2:o1.instructGame();

**break**;

**case** 3:o1.exitGame();

**break**;

}

}

}

**output:**

Enter your choice

1

Play

Enter your first choice

2

Music

ON Off

Enter your choice

3

Exit

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

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**package** leapyear;

**import** java.util.Scanner;

**public** **class** LeapYear {

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

// **TODO** Auto-generated method stub

**int** year;

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

Scanner s1=**new** Scanner(System.***in***);

year=s1.nextInt();

**if**(year%4==0)

{

System.***out***.println("Leap year");

}

**else**

{

System.***out***.println("Not a leap year ");

}

}

}

**output:**

Enter the year:

2020

Leap year

Enter the year

2021

Not a leap year

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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

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**package** student;

**import** java.util.Scanner;

**public** **class** StudentMark {

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

// **TODO** Auto-generated method stub

**int** RollNo;

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

Scanner s1=**new** Scanner(System.***in***);

RollNo=s1.nextInt();

System.***out***.println("Roll number: "+RollNo);

String Name;

System.***out***.println("Enter the name: ");

Scanner s2=**new** Scanner(System.***in***);

Name=s2.next();

System.***out***.println("The name: "+Name);

**int** M1;

System.***out***.println("Enter the marks in physics: ");

Scanner s3=**new** Scanner(System.***in***);

M1=s3.nextInt();

System.***out***.println("The marks in physics: "+M1);

**int** M2;

System.***out***.println("Enter the marks in chemistry: ");

Scanner s4=**new** Scanner(System.***in***);

M2=s4.nextInt();

System.***out***.println("The marks in chemistry: "+M2);

**int** M3;

System.***out***.println("Enter the marks in C.S: ");

Scanner s5=**new** Scanner(System.***in***);

M3=s5.nextInt();

System.***out***.println("The marks in C.S: "+M3);

**int** total=(M1+M2+M3);

System.***out***.println("The total marks: "+total);

**float** percentage=(M1+M2+M3)\*0.333f;

System.***out***.println("The total percentage: "+percentage);

**if**(percentage>=80)

{

System.***out***.println("First class");

}

**else** **if**(percentage>=60)

{

System.***out***.println("Second class");

}

**else** **if**(percentage>=35)

{

System.***out***.println("third class");

}

**else**

{

System.***out***.println("fail");

}

}

}

**output:**

1)Enter the roll number:

784

Roll number: 784

Enter the name:

james

The name: james

Enter the marks in physics:

70

The marks in physics: 70

Enter the marks in chemistry:

80

The marks in chemistry: 80

Enter the marks in C.S:

90

The marks in C.S: 90

The total marks: 240

The total percentage: 79.92

Second class

2)

Enter the roll number:

100

Roll number: 100

Enter the name:

james

The name: james

Enter the marks in physics:

28

The marks in physics: 28

Enter the marks in chemistry:

30

The marks in chemistry: 30

Enter the marks in C.S:

23

The marks in C.S: 23

The total marks: 81

The total percentage: 26.973

fail

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**package** temperature;

**import** java.util.Scanner;

**public** **class** Temperature {

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

// **TODO** Auto-generated method stub

**int** temp;

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

Scanner s1=**new** Scanner(System.***in***);

temp=s1.nextInt();

**if**(temp>=30)

{

System.***out***.println("HOT");

}

**else**

{

System.***out***.println("COLD");

}

}

}

**output:**

Enter the temperature:

45

HOT

Enter the temperature:

-7

COLD

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**package** charector;

**import** java.util.Scanner;

**public** **class** Charector {

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

// **TODO** Auto-generated method stub

**char** ch;

System.***out***.println("enter the charector: ");

Scanner s1=**new** Scanner(System.***in***);

ch=s1.next().charAt(0);

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

{

System.***out***.println("Charector is an alphabet");

}

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

{

System.***out***.println("Charector is a digit");

}

**else** **if**(ch=='!'||ch=='@'||ch=='#'||ch=='$'||ch=='%'||ch=='^'||ch=='&'||ch=='\*')

{

System.***out***.println("Charector is a special charector");

}

**else**

{

System.***out***.println("invalid");

}

}

}

**output:**

1)enter the charector:

a

Charector is an alphabet

2)

enter the charector:

3

Charector is a digit

3)

enter the charector:

^

Charector is a special charector

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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

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**package** grade;

**import** java.util.Scanner;

**public** **class** Grade {

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

// **TODO** Auto-generated method stub

**char** ch;

System.***out***.println("enter the charector: ");

Scanner s1=**new** Scanner(System.***in***);

ch=s1.next().charAt(0);

**switch**(ch)

{

**case** 'E':System.***out***.println("Exelent");

**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");

}

}

}

**output:**

enter the charector:

A

Average

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

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**package** day;

**import** java.util.Scanner;

**public** **class** Day {

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

// **TODO** Auto-generated method stub

**int** a;

System.***out***.println("enter the choice: ");

Scanner s1=**new** Scanner(System.***in***);

a=s1.nextInt();

**switch**(a)

{

**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");

}

}

}

**output:**

enter the choice:

5

FRIDAY

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

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**package** month;

**import** java.util.Scanner;

**public** **class** Month {

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

// **TODO** Auto-generated method stub

String month1;

System.***out***.println("enter the month: ");

Scanner s1=**new** Scanner(System.***in***);

month1=s1.next();

**switch**(month1)

{

**case** "january":

**case** "march":

**case** "may":

**case** "july":

**case** "agust":

**case** "october":

**case** "december":System.***out***.println("31 Days");

**break**;

**case** "april":

**case** "june":

**case** "september":

**case** "november":System.***out***.println("30 Days");

**break**;

**case** "february":System.***out***.println("28 Days");

**break**;

**default**:System.***out***.println("invalid");

}

}

}

**output:**

1)

enter the month:

agust

31 Days

2)

enter the month:

april

30 Days

3)

enter the month:

february

28 Days

4)

enter the month:

fghj

invalid

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