ASSIGNMENT_3

(GANDIPADALA_GANGADHAR)

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

Program:

```
package assignment_3;


import java.util.Scanner;


public class LeapYear {


	public static void main(String[] args) {
		Scanner input = new Scanner(System.in);
		System.out.println("enter year to check :");
		int year = input.nextInt();
		if ((year % 4 == 0 && year % 100 != 0) || year % 400 == 0) {
			System.out.println(year + " Is a laep year");
		} else {
			System.err.println(year + " Is not a 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:

```
package assignment_3;

import java.util.Scanner;

public class StudentCard {

	public static void main(String[] args) {
		Scanner input = new Scanner(System.in);
		System.out.print("Roll No of Student :");
		int rollNo = input.nextInt();
		System.out.print("Name of The Student :");
		input.next();
		String studentName = input.nextLine();
		System.out.print("marks of physics ,chemistry and computer Appplication :");
		int physicsMarks = input.nextInt();// input.next();
		int chemistryMarks = input.nextInt();// input.next();
		int computerAppMarks = input.nextInt();// input.next();
```

```
                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 >= 90) {
                        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.err.println(" you are Falied !!");

        }

}
```

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

program:

```
package assignment_3;

import java.util.Scanner;

public class Temperature {
```

```
	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner input = new Scanner(System.in);
		System.out.println(" enter the temperature in your area : ");
		float temperature=input.nextFloat();
		 System.out.println(" the temperature in your area is "+temperature +" celcius temp");
	}

}
```

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

program:

```
package assignment_3;

import java.util.Scanner;

public class CheckingCharacter {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		Scanner sc = new Scanner(System.in);
		System.out.println(" enter a character : ");
		char ch = sc.next().charAt(0);
		if (ch == 'a' || ch == 'b' || ch == 'c' || ch == 'd' || ch == 'e' || ch == 'f' || ch == 'g' || ch == 'h'
				|| ch == 'i' || ch == 'j' || ch == 'k' || ch == 'l' || ch == 'm' || ch == 'n' || ch == 'o' || ch == 'p'
				|| ch == 'q' || ch == 'r' || ch == 's' || ch == 't' || ch == 'u' || ch == 'v' || ch == 'w' || ch == 'x'
				|| ch == 'y' || ch == 'z') {
			System.out.println(" it is a alphabet character !!");
```

```
		} else if (ch == 'A' || ch == 'B' || ch == 'C' || ch == 'D' || ch == 'E' || ch == 'F' || ch == 'G'
|| ch == 'H'
				|| ch == 'I' || ch == 'J' || ch == 'K' || ch == 'L' || ch == 'M' || ch == 'N' ||
ch == 'O' || ch == 'P'
				|| ch == 'Q' || ch == 'R' || ch == 'S' || ch == 'T' || ch == 'U' || ch == 'V'
|| ch == 'W' || ch == 'X'
				|| ch == 'Y' || ch == 'Z') {
			System.out.println(" it is a alphabet character !!");
		} else if (ch =='1' || ch == '2' || ch == '3' || ch == '4' || ch == '5' || ch == '6' || ch == '7'
|| ch == '8' || ch == '9'
				|| ch == '0') {
			System.out.println(" it is digit character !!");

		} else if (ch == '!' || ch == '@' || ch == '#' || ch == '$' || ch == '%' || ch == '^' || ch == '&'
|| ch == '*'
				|| ch == '(' || ch == ')' || ch == '_' || ch == '-' || ch == '+') {
			System.out.println("it is Special Character !!");
		} else
			System.err.println(" it is not a alphabet or digit or special character !");

	}

}
```

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

program:

```
package assignment_3;

import java.util.Scanner;

public class GradeDiscription {
```

```
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.err.println("Inavlid Input");

		}

}
```

}

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

program:

```
package assignment_3;

import java.util.Scanner;

public class DayNames {

	public static void main(String[] args) {
		// TODO Auto-generated method stub
		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.err.println("Invalid Input ,Please check It ");

            }

        }

}
```

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

program :

```
package assignment_3;

import java.util.Scanner;

public class DaysInMonth {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);
        System.out.println("enter day number : ");
        int dayNum = sc.nextInt();
        switch (dayNum) {
```

```
case 1:
        System.out.println("31 days in january");
        break;
case 2:
        System.out.println("28 days or 29 days in Feb");
        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 march");
        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.err.println("Invalid Input ,Please check It ");

        }
        }

}
```