

Programming I - Assignment 2

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1) Array

Code:

```
package Section3;

import java.util.Scanner;

public class Array {

    public static void main(String[] args) {

        int arrayLength;
        double result=0.0;

        // Declare & create an instance of the Scanner class
        Scanner input = new Scanner(System.in);

        // prompts the user to enter the array length
        System.out.print("How long should the array be? enter a number:");
        arrayLength=input.nextInt(); // assigns the inputed value to the variable

        double[] array1 = new double[arrayLength]; //declaring and assigning
the array

        for (int i=0; i < arrayLength; i++) {
            System.out.print("Enter a number:");
            array1[i] = input.nextInt();
        }

        for (int i=0; i < arrayLength; i++) {
            result += array1[i]; // result = result + array[i] (another way)

            System.out.println(array1[i]); //prints the sum of the array
contents

        } System.out.println("The array sum is: " + result);

    } // end main()

} // end of class
```

2)LeapYear

Code:

```
package Section3;

import java.util.Scanner;

public class LeapYear {

    public static void main (String [] args) {

        int year;
        boolean isleap=false;

        // Declare & create an instance of the Scanner class
        Scanner input = new Scanner (System.in);

        // prompts the user to enter an year
        System.out.print "Enter an year with 4 digits:" ;
        year=input.nextInt(); // assigns the input to the variable

        if ( year % 4 == 0 ) { //divisible by 4,

            if ( year % 100 != 0 ) { //but not by 100
                isleap = true;    //it's a leap year
            }

            else if ( year % 400 == 0 ) { //divisible by both 4 and 100 and also by 400
                isleap = true;    //so it's a leap
            }

        }

        if (isleap)
            System.out.println year + " is a Leap Year";
        else
            System.out.println year + " is not a Leap Year";

    } // end main()

} // end of class
```