

# Input / Output

## Scanner class

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# Input in Java: the Scanner Class

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- The Scanner class comes with Java.
- It allows us to take in data from the console / terminal window.
- It is part of the `java.util` package in the Java Application Programming Interfaces (API).

# Input in Java: the Scanner Class

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- In order to use the Scanner class, place the following line as the first line of code in your file (i.e. before you declare your class):

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

- You can now use all the input methods that have been defined in the Scanner class.
- There are methods to take in ints, doubles, chars etc.

# Input in Java: the Scanner Class

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- Having imported the util package, you will need to write the following instruction in your program.

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

- This declares a Scanner **object** called **scan** (you can name this object anything you wish).
- You must have this instruction to be able to call the methods in the Scanner class.

# Input Methods of the Scanner Class

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```
int age = scan.nextInt();           //reads an integer from the keyboard  
double wages = scan.nextDouble(); //reads a double from the keyboard  
char taxBand = scan.next.charAt(0); //reads a single char from the keyboard  
String firstName = scan.next();     //read a String that has no spaces  
String fullName = scan.nextLine()   //reads a String that contains spaces
```

```
import java.util.Scanner;

public class UsingPrimitiveArrays {

    private static Scanner input = new Scanner (System.in);

    public static void main (String[] args)
    {
        loopWithNoArray();
    }

    public static void loopWithNoArray()
    {
        int number, sum = 0;

        for (int i = 0; i<5; i++)
        {
            System.out.print("Please enter a number :");
            number = input.nextInt();
            sum += number;
        }
        System.out.println("The sum of the values you typed in is : " + sum);
    }
}
```

What is this  
code doing?

# Questions?

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