

Philip Pesic

Week 7

March 5 2023

Week 7 Prog 1

Exercise 1 - The square. In one program, write 2 separate functions, and use them.

a) Prompt the user for the length of one side of the square, and assign/save it in a variable, length

Use the saved length value, to calculate the correct 'return' value for the following 2 functions

b) Function to Calculate area of square, double calcArea ( return length \* length; )

c) Function to Calculate perimeter of square, double calcPerimeter ( return 4\*length; )

```
package Prog1;
import java.util.Scanner;

class prog1 {

    public static double area(double x) {
        double area = x * x;
        return area;
    }

    public static double perimeter(double x) {
        double perimeter = x * 4;
        return perimeter;
    }

    public static void main(String[] args) {
        double length;
        Scanner input = new Scanner(System.in);
        System.out.print("Enter length: ");
        length = input.nextDouble();
    }
}
```

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```
input.close();

System.out.println("Area: " + area(length));
System.out.println("Perimeter: " + perimeter(length));
System.out.println("Philip Pesic 3/5/23");
}
}

Progr1 > J progr1.java > progr1 > main(String[])
1 package Progr1;
2 import java.util.Scanner;
3
4 class progr1 {
5
6     public static double area(double x) {
7         double area = x * x;
8         return area;
9     }
10
11     public static double perimeter(double x) {
12         double perimeter = x * 4;
13         return perimeter;
14     }
15
16     public static void main(String[] args) {
17         double length;
18         Scanner input = new Scanner(System.in);
19         System.out.print("Enter length: ");
20         length = input.nextDouble();
21
22         input.close();
23
24         System.out.println("Area: " + area(length));
25         System.out.println("Perimeter: " + perimeter(length));
26         System.out.println("Philip Pesic 3/5/23");
27     }
28
29 }
```

Run | Debug

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

Run: progr1

```
+ Programs git:(main) x /usr/bin/env /Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/pippo/Library/Application\ Support/Code/User/workspaceStorage/25f417367d41eaaac1fdab465f5bca/redhat.java/jdt_ws/Programs_a03e32e9/bin Progr1.progr1
Enter length: 12
Area: 144.0
Perimeter: 48.0
Philip Pesic 3/5/23
+ Programs git:(main) x cd /Users/pippo/github/cs284/Week7/Programs ; /usr/bin/env /Library/Java/JavaVirtualMachines/temurin-17.jdk/Contents/Home/bin/java -XX:+ShowCodeDetailsInExceptionMessages -cp /Users/pippo/Library/Application\ Support/Code/User/workspaceStorage/25f417367d41eaaac1fdab465f5bca/redhat.java/jdt_ws/Programs_a03e32e9/bin Progr1.progr1
Enter length: 21.3
Area: 453.69000000000005
Perimeter: 85.2
Philip Pesic 3/5/23
+ Programs git:(main) x
```

Ln 26, Col 51 Spaces: 4 UTF-8 LF () Java Prettier

I learned: how to write functions