Student Preparation Program for the Semester 2

Programming Tutorial

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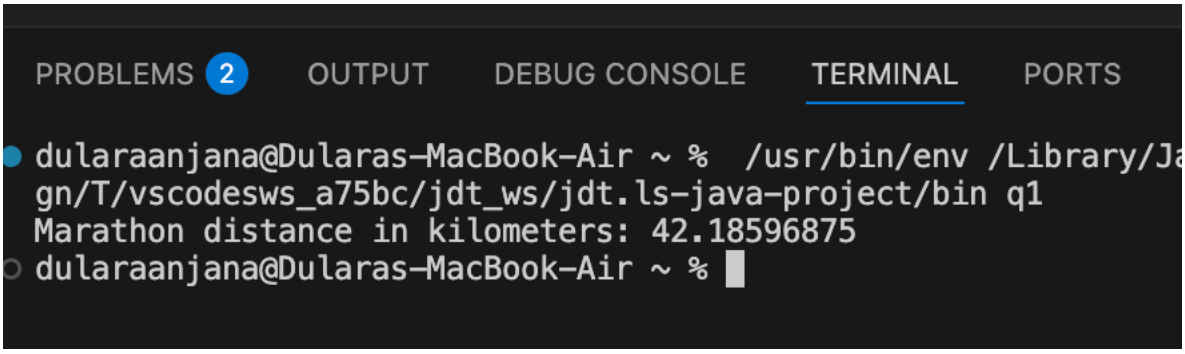
Q1

```java
public class q1 {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        int miles;
        int yards;
        double kilometers;

        miles = 26;
        yards = 385;

        kilometers = (miles + (yards / 1760.0)) * 1.609;

        System.out.println("Marathon distance in kilometers: " + kilometers);
    }

}
```

Output



Q2

q2.java 1

Users > dularaanjana > Desktop > q2.java > Language Support for Java(TM) by Red Hat > q2 > main

```java
public class q2 {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        int[] A = {10, 20, 30, 40, 50};
        int[] B = {34, 67, 12, 89, 12};
        int[] C = new int[5];

        for (int i = 0; i < 5; i++) {
            C[i] = A[i] + B[i];
        }

        System.out.print(s:"Array C: [");
        for (int i = 0; i < 5; i++) {
            System.out.print(C[i]);
            if (i < 4) {
                System.out.print(s:", ");
            }
        }
        System.out.println(x:"]");
    }
}
```

Output

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
dularaanjana@Dularas-MacBook-Air ~ %  /usr/bin/env /Library/
gn/T/vscodesws_a75bc/jdt_ws/jdt.ls-java-project/bin q2
Array C: [44, 87, 42, 129, 62]
dularaanjana@Dularas-MacBook-Air ~ %
```

Q3

Demo.java 3

Users > dularaanjana > Desktop > Demo.java > ...

```java
import java.util.Scanner;

class EvenOddNumber {
    public boolean findEvenOrOdd(int i) {
        if (i % 2 == 0) {
            return true;
        } else {
            return false;
        }
    }
}

public class Demo {
    Run main | Debug main | Run | Debug
    public static void main(String[] args) {
        Scanner input = new Scanner(System.in);

        EvenOddNumber obj = new EvenOddNumber();

        System.out.print(s:"Enter a number: ");
        int number = input.nextInt();

        boolean result = obj.findEvenOrOdd(number);

        if (result) {
            System.out.println(number + " is an Even number.");
        } else {
            System.out.println(number + " is an Odd number.");
        }

        input.close();
    }
}
```

Output

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS

```
dularaanjana@Dularas-MacBook-Air ~ %  /usr/bin/env /Library/Java/JavaVirtualMa
f4b/jdt_ws/jdt.ls-java-project/bin Demo
Enter a number: 59
59 is an Odd number.
dularaanjana@Dularas-MacBook-Air ~ %
```

Q4

Welcome | Stars.java 1

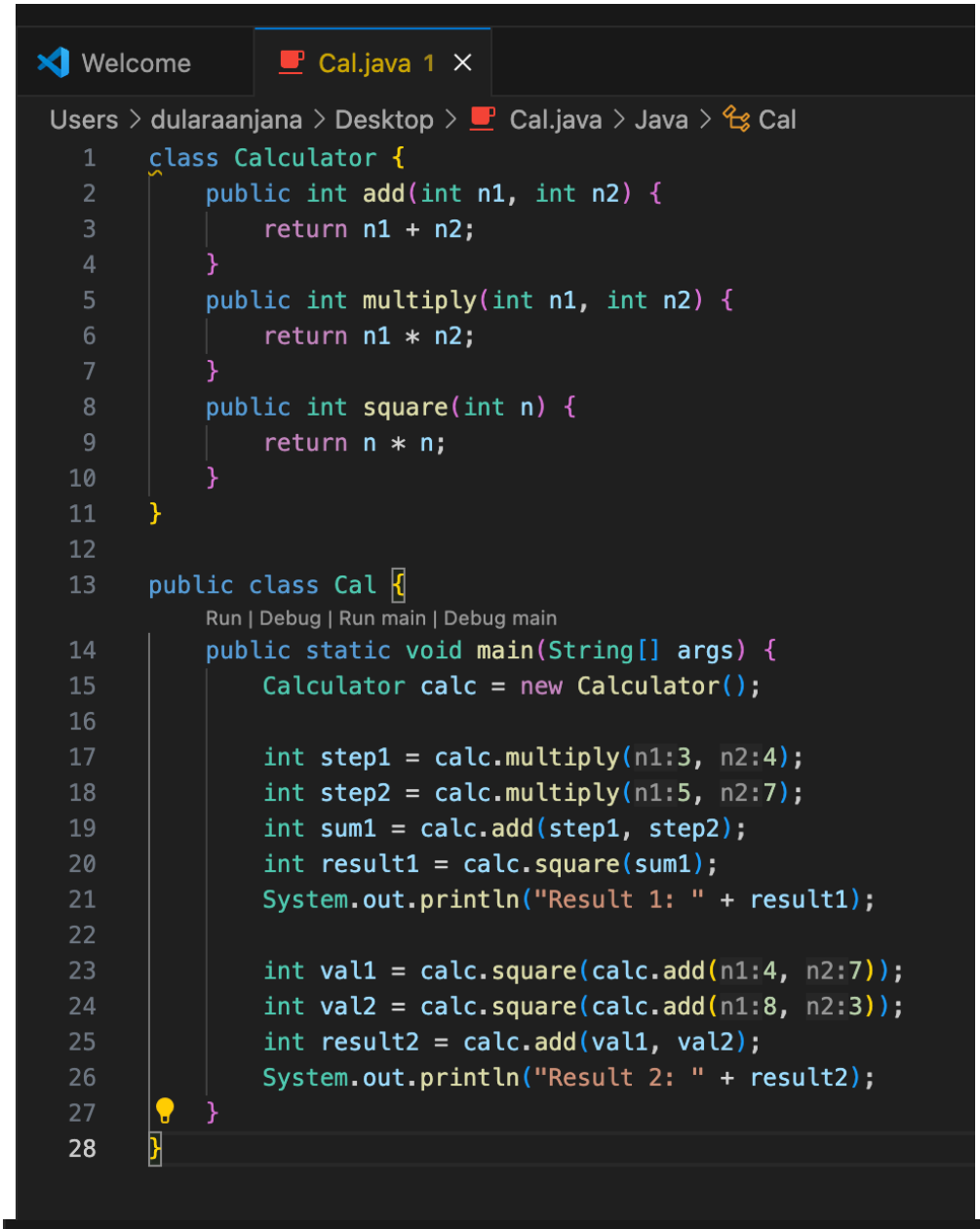
Users > dularaanjana > Desktop > Stars.java > Language Support for Java(TM) by Red Hat > Stars > main(String[])

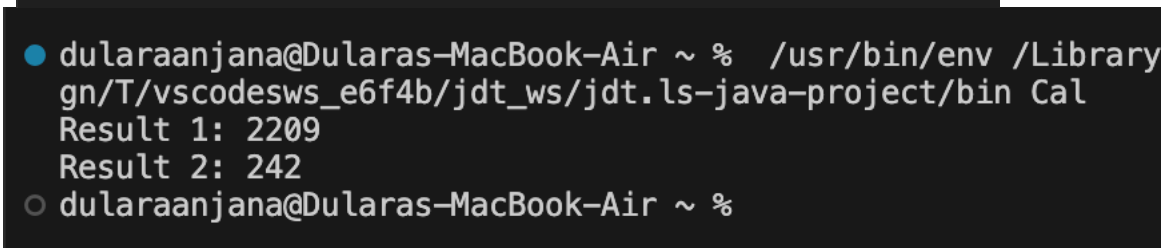
```java
public class Stars {
    Run | Debug | Run main | Debug main
    public static void main(String[] args) {

        int row = 0;
        while (row < 5) {
            int col = 0;
            while (col < 5) {
                System.out.print("* ");
                col++;
            }
            System.out.println();
            row++;
        }

        System.out.println();


        for (int i = 1; i <= 5; i++) {
            for (int j = 5; j > i; j--) {
                System.out.print(" ");
            }
            for (int k = 1; k <= i; k++) {
                System.out.print("* ");
            }
            System.out.println();
        }
    }
}
```

Output

```
dularaanjana@Dularas-MacBook-Air ~ %  /usr/bin/env /Library/Java/J
gn/T/vscodesws_e6f4b/jdt_ws/jdt.ls-java-project/bin Stars
* * * * *
* * * * *
* * * * *
* * * * *
* * * * *

    *
   * *
  * * *
 * * * *
* * * * *
dularaanjana@Dularas-MacBook-Air ~ %
```

Q5


Welcome
Cal.java 1
Users > dularaanjana > Desktop > Cal.java > Java > Cal
class Calculator {
public int add(int n1, int n2) {
return n1 + n2;
}
public int multiply(int n1, int n2) {
return n1 * n2;
}
public int square(int n) {
return n * n;
}
}
public class Cal {
Run | Debug | Run main | Debug main
public static void main(String[] args) {
Calculator calc = new Calculator();
int step1 = calc.multiply(n1:3, n2:4);
int step2 = calc.multiply(n1:5, n2:7);
int sum1 = calc.add(step1, step2);
int result1 = calc.square(sum1);
System.out.println("Result 1: " + result1);
int val1 = calc.square(calc.add(n1:4, n2:7));
int val2 = calc.square(calc.add(n1:8, n2:3));
int result2 = calc.add(val1, val2);
System.out.println("Result 2: " + result2);
}
}


dularaanjana@Dularas-MacBook-Air ~ % /usr/bin/env /Library
gn/T/vscodesws_e6f4b/jdt_ws/jdt.ls-java-project/bin Cal
Result 1: 2209
Result 2: 242
dularaanjana@Dularas-MacBook-Air ~ %