









Get Started

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## **②** CalculateLine ☆ Favorite

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Language/Type: 

§ Java <u>basics console output expressions variables interactive programs</u>

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Write an interactive console program in a class named **CalculateLine** that calculates y coordinates on a line. First, it prompts the user for a slope m, and an intercept b (as seen in the line equation of the form y = mx + b). Then the program prompts the user for x values until the user enters a -1. For each entered number, print the y value on that line for that entered x value. Here is a sample run of the program (user input is shown like this):

```
This program calculates y coordinates for a line.

Enter slope (m): 2

Enter intercept (b): 4

Enter x: 5

f(5) = 14

Enter x: 1

f(1) = 6

Enter x: -1
```

Type your Java solution code here:

```
1 import java.util.*;
2 public class CalculateLine
3 {
      public static void main(String[] args)
4
5
6
         System.out.println("This program calculates y coordinates for a line.");
7
         run():
8
      }
      public static void run ()
9
100
11
         Scanner kb = new Scanner(System.in);
         System.out.print("Enter slope (m): ");
12
13
         int slope = kb.nextInt();
14
         System.out.print("Enter intercept (b): ");
15
         int intercept = kb.nextInt();
16
         int yValue;
```

```
int xValue;
17
18
         do
19
         System.out.print("Enter x: ");
20
         xValue = kb.nextInt();
21
         if(xValue != -1)
22
23
24
            yValue = slope * xValue + intercept;
            System.out.println("f(" + xValue + ") = " + yValue);
25
26
27
         }while(xValue != -1);
28
      }
29 }
3Ø
31
32
33
```

This problem asks for a **complete program.** This should essentially be contents you could put into a file and run outside of CodeStepByStep.









## Need help?



If you do not understand how to solve a problem or why your solution doesn't work, please contact your TA or instructor.

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