

Reboot

Write a **complete program** that will compile and run. Suppose your code is in a file named **Quiz4.java**. Add code that satisfy the following requirements.

1. Add a method named **abs** that has a single integer parameter and returns the absolute value of the integer held in the parameter.
2. Add a method named **between** that has 3 parameters. The method returns true if the value of the second parameter is greater than the value of the first parameter and the value of the second parameter is less than the value of the third parameter. Otherwise the method returns false.
3. Add a method named **count** that has 2 parameters. The first parameter holds a reference to an array of integers and the second parameter holds an integer. The method returns the number of instances of the value in the second parameter that are found in the first parameter.
4. In **main**, do the following.
 - Create a Scanner connected to the keyboard.
 - Ask the user to enter three integers, read the value from the keyboard, and store the values in variables named **input1**, **input2**, and **input3**.
 - Create an array named **arr** that holds the values held in **input1**, **input2**, and **input3**.
 - Compute the absolute value of the value in **input1** using **abs()** and store the absolute value in a variable named **absValue**.
 - Use the method named **between()** to determine if the value in **input1** is between the values in the variables named **input2** and **input3**. Store the value returned by **between()** in a variable named **isBetween**.
 - Determine how many times the value **2** is found in the array named **arr** using the method **count()**. Store the result in a variable named **result**.

```

import java.util.Scanner;

class Quiz4 {

    public static void main(String[] chickens) {

        Scanner kb = new Scanner(System.in);

        System.out.println("Please enter in 3 integers");

        int input1 = kb.nextInt();
        int input2 = kb.nextInt();
        int input3 = kb.nextInt();

        //int[] arr = {input1, input2, input3};

        int[] arr = new int[3];
        arr[0] = input1;
        arr[1] = input2;
        arr[2] = input3;

        int absValue = abs(input1);

        boolean isBetween = between(input2, input1, input3);

        int result = count(arr, 2);
    }

    static int abs(int x) {

        if (x < 0) {
            return -1 * x;
        }
        else {
            return x;
        }

        //return (x < 0) ? -1 * x : x;
    }

    static boolean between(int val1, int val2, int val3) {
        if (val2 > val1 && val2 < val3) {
            return true;
        }
        return false;
    }

    static int count(int[] arr, int v) {
        int counter = 0;

        for(int elm : arr) {
            if (elm == v) {
                counter++;
            }
        }
        return counter;
    }
}

```