

/* Main.java with Hints added */

```
public class Main {
```

```
    public static final int WIDTH = 12;
```

```
    public static final int HEIGHT = 8;
```

```
    // Given a 2D array of integers, count the values which are between 0 and 100 inclusive.
```

```
    // The size of the array is a WIDTH x HEIGHT. The array is passed as the parameter A.
```

```
    //1. Array parameter in Java is: int[][] A
```

```
    public static void count_0_to_100(int[HEIGHT][WIDTH] A)
```

```
    {
```

```
        int count = 0;
```

```
        for(int y = 0, y < HEIGHT, y+1) // 2. Should use ";" 3. y=y+1 or y+=1 or y++
```

```
        {
```

```
            //4. (Same as 2.)
```

```
            //5. (Same as 3.)
```

```
            for (int x = 0, x < WIDTH, x+1)
```

```
                if(0 <= A[y][x] <= 100) //6. Should be 0 <= A[y][x] && A[y][x] <= 100
```

```
                    count+1; //7. count=count+1 or count+=1 or count++
```

```
        }
```

```
        //8. Java needs "+" operator to connect two strings
```

```
        System.out.print("The count is: " count);
```

```
    }
```

```
    public static void main(String[] args)
```

```
    {
```

```
        int[HEIGHT][WIDTH] values; //9. Create Array: int[][] values = new int[HEIGHT][WIDTH];
```

```
        int x, y;
```

```
        //create some data in values[][]
```

```
        for(y = 0 ; y < HEIGHT; y++)
```

```
            for(x = 0 ; x < WIDTH; x++)
```

```
                values[y][x] = ((x+13)*(y+29))%413-139;
```

```
        //display contents in values[][]
```

```
        for(y = 0 ; y < HEIGHT; y++)
```

```
        {
```

```
            for(x = 0 ; x < WIDTH ; x++)
```

```
                System.out.printf("%5d", values[y][x]); //width = 5, right aligned
```

```
            System.out.println();
```

```
        }
```

```
        //call the function count_0_to_100 for counting(0...100)
```

```
        count_0_to_100(values[HEIGHT][WIDTH]); //10. Pass the array: simply "values"
```

```
    }
```

```
}
```