Recitation 3

Continue to help your students with any jdk setup issues they may have. Also, this recitation, please be sure to stress code readability and proper formatting.

Exercise 1: common errors
Can you find the mistake in the following code snippets?

1. Public static void main(string[] args)
2. Int int == 5;
3. int ==4;
4. string 3s = “string here”;
5. System.out.println(“Hello, World!”)

Exercise 2: Drawing with library calls
For this exercise we will use a module called “picasso” that supplies the following methods to draw lines and circles on the screen. The module keeps track of the current position on the screen of the “pen” that is used to draw, which starts out at the upper left-hand corner.

drawCircle(int diameter)
This method draws a circle of the given diameter (in inches), centered around the current position (and doesn’t change the current position).

drawLineDown(int length)
This method draws a vertical line of the given length, starting from the current position and going straight down. The current position is not changed.
drawLineRight(int length)
This method draws a horizontal line of the given length, starting from the current position and going straight to the right. The current position is not changed.
moveRight(int d)
This method moves the current position d inches to the right.
moveLeft(int d)
This method moves the current position d inches to the left.
moveUp(int d)
This method moves the current position d inches up.
moveDown(int d)
This method moves the current position d inches down.

a) Write a program that draws a smiley face. The size of the smiley face should be an input from the user.

b) As a group come up with a picture to draw and draw it.

Exercise 3: IO.java
For this exercise, you will need IO.java to be in the same folder as your own java file. Write a program that asks the user for 3 numbers and the user's name, then tells the user the average of those 3 numbers.

The result should look like this:

```
Enter 3 numbers
15
16
17
Enter your name
Robert
Robert, the average of your numbers is 16.0
```

Exercise 4: more logical thinking
Two skydivers are dropped from a plane and land on a long, straight east-west road. Neither one knows where on the road the other has landed. Neither one even knows whether the other has landed to the east or to the west. The skydivers can do four things: walk east, walk west, put down their parachute, or pick up their parachute. Propose an algorithm for the skydivers to follow that will guarantee that they will meet up with one another. Express this algorithm as a flowchart. Note that there should be a single algorithm that both skydivers will follow separately.