

## Methods 1 Lesson Plan\_01

- Create a lesson plan for a concept covered in the pre-work or the first programming course in this program (not data structures).
- This should be a lesson plan for a High School class, ~45 minutes in length.
- Assume the appropriate level of prior knowledge.
- You need not create supplemental materials like sample code, assignments, etc.
- You could use the template found [here](#), but you do not need to, or you can modify it.
- Use whatever file format that is more convenient for you, but name the file **01\_lesson** and put it in your **meth1** folder.

Teacher: Mr. Irimina

### **Aim: Conditionals Review before a project/test**

Warm up : time: 5-6 min

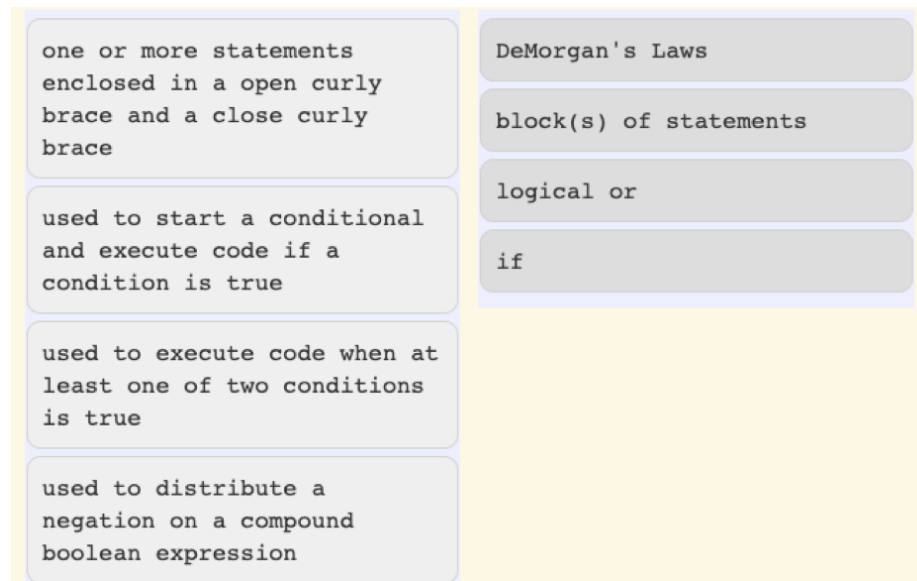
#### **Exercise #1 , first individually then check with a partner**

Drag the definition from the left and drop it on the correct concept on the right.  
Click the "Check Me" button to see if you are correct

used to execute code only when a Boolean condition is true	compound boolean expression
an expression that is either true or false	Boolean expression
joins two conditions and it will only be true if both of the conditions are true	conditional
an expression with two or more expressions joined together with logical ands or ors	logical and

#### **Exercise #2 first individually then check with a partner**

Drag the definition from the left and drop it on the correct method on the right.  
Click the "Check Me" button to see if you are correct.



## Lesson Content

time: 7-8 min

Review rules and common mistakes - generated by the students with support from the teacher. Refer to older charts posted/previous reference materials to activate prior knowledge.

Ex:

== VS =

adding a ; at the end of an i(test);

writing if's one after the other instead of a if-if else-else structure

Trouble with understanding or applying negation (!).

**Lesson Activity time: 30 min (individual/pairs/trios)**

Work individually to solve the challenges and ask your team members as needed. First put the statements in order on a scrap piece of paper/work on the website directly to move the blocks.

If you finish early, add your programs, one at a time, in your code editor. Did you follow the scrap paper plan you wrote? Did you need to change it? Explain.

Note: When typing up the programs, don't forget about where this program fits in a Java program and how to use the main method to test it.

### Activity #1

The following program segment should print if your guess is too low, correct, or too high But, the blocks have been mixed up.

```
1 else
2 int guess = 10;
  int answer = 5;
3 {
  System.out.println("You are right!");
}
4 {
  System.out.println("Your guess is too high");
}
5 if (guess < answer)
6 {
  System.out.println("Your guess is too low");
}
7 else if (guess == answer)
```

.....

## Activity #2

The main method in the following class should print if your name starts with a vowel or not. But, the blocks have been mixed up.

```
1      System.out.println("Starts with a vowel");
2      boolean aF = lowerFirst.equals("a");
      boolean eF = lowerFirst.equals("e");
      boolean iF = lowerFirst.equals("i");
      boolean oF = lowerFirst.equals("o");
      boolean uF = lowerFirst.equals("u");
3      }
      }
4      public static void main(String[] args)
      {
5          if (aF || eF || iF || oF || uF)
6      public class Test1
      {
7          System.out.println("Starts with a consonant");
8          String name = "Julian";
          String firstLetter = name.substring(0,1);
          String lowerFirst = firstLetter.toLowerCase();
9          else
```

Differentiation / a combination of more challenging problems for more advanced students/ more problems available for them to choose from.

### Closing/ Exit Ticket:

Fill out Google Form about today's work, what worked well and what did not work as intended.