Methods1 Livecode Assignment:

- - Create a live-code experience by writing code (or using existing code) and annotating it with teacher-facing comments that would explain how to develop that code live.
- - Include questions for students, when to pause, when to ask for predictions, purposeful mistakes, etc.
- - Use whatever file format that is more convenient for you, but name the file **02_livecode** and put it in your **meth1** folder.

**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. Put the blocks in the correct order and then test the program in repl.it.

We are doing this assignment together. Teacher shares the wireless keyboard with students to complete the program.

| | **Questions** |
|---|---|
| 1 else<br>2 int guess = 10;<br>int answer = 5;<br>3 {<br>System.out.println("You are right!");<br>}<br>4 {<br>System.out.println("Your guess is too high");<br>}<br>5 if (guess < answer)<br>6 {<br>System.out.println("Your guess is too low");<br>}<br>7 else if (guess == answer) | 1. Which lines of code should be at the top of the program? Why?<br>2. How do we continue the program to test for the guesses?<br>3. What is the difference between an -if, else if and else - vs three if statements?<br>4. What will be the output of the program? Why?<br>5. What else do you need for the program to run and test in a Java file?<br><br>Live Demo |

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.

| | Questions |
|---|---|
| 1<br>2<br>3<br>4<br>5<br>6<br>7<br>8<br>9 | Which line(s) of code should be at the top of the program? Why?<br><br>Which line(s) of code should be next? Why?<br><br>What does the firstLetter variable contain?<br><br>What does the lowerFirst variable contain?<br><br>What will be the output of the program? |

```
            System.out.println("Starts with a vowel");
        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");
    }
}
    public static void main(String[] args)
    {
        if (aF || eF || iF || oF || uF)
public class Test1
{
            System.out.println("Starts with a consonant");
        String name = "Julian";
        String firstLetter = name.substring(0,1);
        String lowerFirst = firstLetter.toLowerCase();
        else
```

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

**Solutions**
**Activity #1**

```
int guess = 10;
int answer = 5;

if (guess < answer)

{
    System.out.println("Your guess is too low");
}

else if (guess == answer)

{
    System.out.println("You are right!");
}

else

{
        System.out.println("Your guess is too high");
}
```

## Activity 2

```
public class Test1
{
    public static void main(String[] args)
    {
        String name = "Julian";
        String firstLetter = name.substring(0,1);
        String lowerFirst = firstLetter.toLowerCase();

        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");

        if (aF || eF || iF || oF || uF)

            System.out.println("Starts with a vowel");

        else

            System.out.println("Starts with a consonant");

    }
}
```