Part 1: Making Formatter Method

In this part you will be focusing on making several methods in your class. You will want to have a main method ready to go so you can test your methods as you create them.

Part 1A: First Name Only

- Name: formatName
- Inputs: 1 String
- Output: ----
- Example Calls
    - formatName("Emily") → "Emily   "
        - There are three spaces at the end!. This method prints a string with the given format.
        - Overall 8 characters for printing the name
    - formatName("abcdefgh") → "abcdefgh"
- Hints:
    - You can actually make a string using the same kind of formatting we do with **printf**! Just use String.format(formatString, variable1, variable2...). If you don't remember how printf works, please go back and review it.

Part 1B: First Name and Last Name

- Name: formatName
    - Yes, this must be the exact same as the previous method.
    - Yes, this is a completely new method.
- Inputs: 2 Strings
- Output: -----
- Example Calls
    - formatName("Emily", "Schmidt") → "Emily   Schmidt "
        - Prints a string. There are four spaces at the end of Emily. One space is after Schmidt
        - 8 characters for printing the first name and 8 for the last name.
        - Separated by a space.
    - formatName("abcdefgh", "ijklmnop") → "abcdefgh ijklmnop"

Instructions Continued on Next Page

Part 1C: First Name, Middle Initial and Last Name

- Name: formatName
  - Yes, this must be the exact same as the previous methods.
  - Yes, this is a completely new method.
- Inputs: 2 Strings and 1 Character
- Output: ---
- Example Calls
  - formatName("Emily", 'E', "Schmidt") → "Emily   E.   Schmidt "
    - There are four spaces at the end of Emily. There are 7 spaces after E.. One space is after Schmidt.
    - 8 characters for printing each part, separated by a space
  - formatName("abcdefgh", 'i', "jklmnopq") → "abcdefgh i.   jklmnopq"

Part 1D: First Name, Full Middle Name and Last Name

- Name: formatName
  - Yes, this must be the exact same as the previous methods.
  - Yes, this is a completely new method.
- Inputs: 3 Strings
- Output: ----
- Example Calls
  - formatName("Emily", "Emma", "Schmidt") → "Emily   Emma   Schmidt "
    - There are four spaces at the end of Emily! There are 5 spaces after Emma. One space is after Schmidt.
    - 8 characters for printing each part, separated by a space
  - formatName("abcdefgh", "ijklmnop", "qrstuvwx") → "abcdefgh ijklmnop qrstuvwx"

Part B: Add a Front End

Coding Rules (Needed for Full Credit)

- Your main method can be up to 35 lines total (excluding comments).
- All other methods (excluding comment lines) can not be longer than 20 lines.
- You cannot change the formatName methods you wrote for the first part.
- You can only have 1 Global Variable.
- You can write any extra method you like, but your class must have 4 formatName methods.

Sample Runs on Next Page

Sample Runs (Rubric is on the next page)

```
Welcome to the Name Formatter
Select an Option!
1. Only First Name
2. First Name, and Last Name
3. First Name, Middle Initial, and Last Name
4. First Name, Middle Name, and Last Name
5. Exit
1
Please enter the name parts separated by a space: Bob
Bob
Select an Option!
1. Only First Name
2. First Name, and Last Name
3. First Name, Middle Initial, and Last Name
4. First Name, Middle Name, and Last Name
5. Exit
2
Please enter the name parts separated by a space: Emily Schmidt
Emily     Schmidt
Select an Option!
1. Only First Name
2. First Name, and Last Name
3. First Name, Middle Initial, and Last Name
4. First Name, Middle Name, and Last Name
5. Exit
3
Please enter the name parts separated by a space: Harry S Truman
Harry     S.        Truman
Select an Option!
1. Only First Name
2. First Name, and Last Name
3. First Name, Middle Initial, and Last Name
4. First Name, Middle Name, and Last Name
5. Exit
4
Please enter the name parts separated by a space: Elon Reeve Musk
Elon      Reeve     Musk
Select an Option!
1. Only First Name
2. First Name, and Last Name
3. First Name, Middle Initial, and Last Name
4. First Name, Middle Name, and Last Name
5. Exit
```

Thank You for using the Name Formatter!

Scoring Rubric:
- **Successful Submission via CODE (12 points):** You will receive full credit for this if your code passes all the tests. Otherwise you will get zero or partial credit.
- **Writing comments for methods (2 points):** Writing comments for all methods (before each method starts) that explain the purpose of the method along with explaining parameters and return type earn full credit. .
- **Correct Style (2 points):** You will receive full credit if your code has 0 style errors. Also your code has comments at the top at least with your name and description, and some comments inside the code to explain the code.
- **Proper Programming Practices (4 Points):** If your program is written applying all of the programming practices **covered in class:**
  - Using the string class properly
  - Proper logic
  - Using a loop properly to repeat in the main method
  - Not using things that aren't discussed in the class
  - Rules covered in Part B must be followed for full credit.