**Assignment: Python Basics**

**Instructions:**

1. Complete the following tasks based on the concepts covered in the "Python Basics" session. Write your Python code in a .py file or use a Jupyter Notebook to solve the problems.

2. Ensure that your code is well-commented, and variable names are descriptive.

3. If any task requires output, print the result to the console.

4. Submit the completed .py file or Jupyter Notebook.

**Task 1:** Variables and Data Types

a) Create three variables: one for storing your age (integer), one for your name (string), and one to check if you are a student (Boolean). Print the variables.

b) Perform the following operations and print the results:

- Add 25 to your age variable.

- Concatenate your name with the string "Smith."

- Negate the Boolean variable (if True, make it False, and vice versa).

**Task 2:** Expressions and Operators

a) A rectangle has a width of 5.5 units and a height of 3.25 units. Store width and height in variables. Create a new variable called area and write an expression to calculate the area. Print the area in the output.

b) Create a temperature variable in Celsius. Convert it to Fahrenheit using the formula: F = (C \* 9/5) + 32. Store this temperature in a variable called Fahrenheit and print this variable.

a) Create a variable called radius and give it a value of 5. Calculate the area of a circle with this radius and store it in a variable called area. Print area at the end of your code. (Use the formula: area = π \* radius^2, where π (pi) is approximately 3.14159).

**Task 3:** Introduction to Data Structures

a) Create a list called "fruits" containing the following fruits: "apple," "banana," "orange," "grape," and "kiwi." Print the list.

b) Create a tuple named "months" with the names of the first three months of the year. Print the tuple.

**Task 4:** List Manipulation

a) Given the list of numbers below, write a Python program to calculate the sum and average of these numbers. Print both results.

numbers = [12, 34, 45, 67, 89, 100, 23, 56]

b) Remove the first and last elements from the "fruits" list created earlier. Print the updated list.