**Assignment: Python Classes and Functions**

**Part A: Classes in Python**

1. **Class Definition and Object Creation** Create a Python class called "Student" that has the following attributes: **name**, **age**, and **grade**. Define an initialization method to initialize these attributes when an object of the class is created. Create an instance of the class and set the attributes. Finally, print the attributes of the student object.
2. **Methods in a Class** Extend the "Student" class from the previous question. Add a method called "is\_passing" that returns **True** if the student's grade is greater than or equal to 50 and **False** otherwise. Create an instance of the class and use this method to check if the student is passing. Display the result.
3. **Inheritance and Subclasses** Create a new class called "HighSchoolStudent" that inherits from the "Student" class. Add an additional attribute called **school\_name** to the "HighSchoolStudent" class. Create an instance of the "HighSchoolStudent" class and set both the attributes, including the inherited attributes from the "Student" class. Print all the attributes of the high school student.

**Part B: Functions in Python**

1. **Function with Parameters** Write a Python function called "calculate\_rectangle\_area" that takes two parameters, **length** and **width**, and returns the area of a rectangle. Call the function with different sets of values and display the results.
2. **Function with Default Parameters** Create a Python function called "greet" that takes a name as a parameter and a greeting message as an optional parameter with a default value of "Hello". The function should return a formatted greeting message. Test the function by calling it with and without the optional parameter and display the results.
3. **Function with Variable Number of Arguments** Write a Python function called "calculate\_average" that takes a variable number of arguments and calculates the average of those numbers. Use this function to find the average of 5, 10, 15, and 20, and display the result.