**Task: Student Grade Calculator**

Description: You are tasked with creating a program that calculates the average grade for a student based on their scores in different subjects. The program should take input from the user, store the scores in a list, calculate the average, and provide a corresponding letter grade based on the average score.

1. Create an empty list called "scores" to store the student's scores.
2. Prompt the user to enter the number of subjects they have taken.
3. Using a loop, ask the user to input the scores for each subject and append them to the "scores" list.
4. Calculate the average score by summing up all the scores and dividing by the total number of subjects.
5. Based on the average score, use conditional statements to assign a letter grade to the student:
   * If the average score is >= 90, assign the grade "A".
   * If the average score is >= 80, assign the grade "B".
   * If the average score is >= 70, assign the grade "C".
   * If the average score is >= 60, assign the grade "D".
   * If the average score is < 60, assign the grade "F".
6. Display the average score and the corresponding letter grade to the user.

**Task: Shopping Cart Calculator**

Description: You are creating a program to calculate the total cost of items in a shopping cart. The program should allow the user to enter the names and prices of multiple items, calculate the subtotal, apply a discount based on the total cost, and provide the final amount to be paid.

Instructions:

1. Create an empty list called a "cart" to store the items.
2. Prompt the user to enter the number of items they want to add to the cart.
3. Using a loop, ask the user to input the name and price of each item, and append them as tuples to the "cart" list.
4. Calculate the subtotal by summing up the prices of all the items in the cart.
5. Apply a discount based on the total cost using conditional statements:
   * If the subtotal is greater than or equal to $100, apply a 10% discount.
   * If the subtotal is greater than or equal to $50, apply a 5% discount.
   * If the subtotal is less than $50, no discount is applied.
6. Calculate the final amount to be paid by subtracting the discount from the subtotal.
7. Display the subtotal, discount amount, and final amount to the user.

**Student Grade Calculator with Grade Points**

Description: You are tasked with creating a program that calculates the average grade for a student based on their scores in different subjects. The program should take input from the user, store the scores in a dictionary, calculate the average, provide a corresponding letter grade based on the average score, and assign grade points to each letter grade.

Instructions:

1. Create an empty dictionary called "scores" to store the student's scores for different subjects.
2. Prompt the user to enter the number of subjects they have taken.
3. Using a loop, ask the user to input the scores for each subject and store them in the "scores" dictionary with the subject name as the key.
4. Create a function called "calculate\_average" that takes the "scores" dictionary as an argument and calculates the average score.
5. Inside the "calculate\_average" function, calculate the average score by summing up all the scores and dividing by the total number of subjects.
6. Based on the average score, use conditional statements to assign a letter grade to the student:
   * If the average score is >= 90, assign the grade "A".
   * If the average score is >= 80, assign the grade "B".
   * If the average score is >= 70, assign the grade "C".
   * If the average score is >= 60, assign the grade "D".
   * If the average score is < 60, assign the grade "F".
7. Create a dictionary called "grade\_points" that maps the letter grades to their corresponding grade points:
   * "A" maps to 4.0
   * "B" maps to 3.0
   * "C" maps to 2.0
   * "D" maps to 1.0
   * "F" maps to 0.0
8. Display the average score, the corresponding letter grade, and the grade points to the user.