Write a MATLAB program that performs the following tasks:

1. Prompt the user to enter marks for 5 students (out of 100).

2. For each mark:

   o Display the grade using the following scheme:

      ▪ A: 90–100

      ▪ B: 80–89

      ▪ C: 70–79

      ▪ D: 60–69

      ▪ F: Below 60

3. After collecting all marks, display a menu with these options:

   • Show all marks as a bar chart
   • Show average marks
   • Exit

4. Based on the user's choice, perform the action using a switch-case block.

   o Option 1: Plot the marks using a bar chart

   o Option 2: Display the average of the marks

   o Option 3: Exit the program with a thank you message

5. Repeat the menu until the user chooses to exit.

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Instructions for Students:

• Use for loop to take input of 5 marks and store them in an array.

• Use if-elseif-else to determine grades.

• After collecting all inputs, use while true loop to display the menu and interact with user.

• Use switch-case for menu handling.

• Use bar() to display bar chart.

• Use mean() to calculate average.