Aim:

Write a Python program to calculate the average marks for 5 subjects. The program should prompt the user to input the marks for each subject. After receiving the input, it should compute the average marks and then determine the corresponding grade based on the following grading system:

- A: 90 - 100
- B: 80 - 89
- C: 70 - 79
- D: 60 - 69
- F: Below 60

The program should display the average marks up to 2 decimal places and the assigned grade.

Source Code:

gradecalc.py

```python
# Input marks for 5 subjects
marks = []
for i in range(5):
    subject_marks = float(input(f"subject {i + 1}: "))
    marks.append(subject_marks)

# Calculate average marks
average_marks = sum(marks) / len(marks)

# Display average marks
print(f"Average Marks: {average_marks:.2f}")
average_marks = sum(marks) / len(marks)
if average_marks >= 90:
    grade = "A"
elif average_marks >= 80:
    grade = "B"
elif average_marks >= 70:
    grade = "C"
elif average_marks >= 60:
    grade = "D"
elif average_marks >= 50:
    grade = "E"
else:
    grade = "F"
# Display the grade
print(f"Grade: {grade}")
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
subject 1: 67.8
subject 2: 89.7

subject 3: 90.5
subject 4: 90.0
subject 5: 98.0
Average Marks: 87.20
Grade: B

Test Case - 2
User Output
subject 1: 89.50
subject 2: 91.50
subject 3: 92.0
subject 4: 97.45
subject 5: 89.7
Average Marks: 92.03
Grade: A