1. Write a C program to input marks of five subjects . Calculate percentage and grade according to following:

   Percentage >= 90% : Grade A

   Percentage >= 80% : Grade B

   Percentage >= 70% : Grade C

   Percentage >= 60% : Grade D

   Percentage >= 40% : Grade E

   Percentage < 40% : Grade F

Step 1 . Created the directory structure using following command

mkdir src exec && touch src/main.c

Step 2. code inside `main.h`

```
#include <stdio.h>
#define TOT_SUBS 5 // 5 subject
#define FULL_MARK 100 //assuming each subject of 100 marks

int main() {
  float marks[TOT_SUBS], total = 0, percentage;
  char grade;

  // Input marks for 5 subjects
  int sub;
  for (sub = 0; sub < TOT_SUBS; sub++) {
     printf("Enter marks for subject %d: ", sub + 1);
     scanf("%f", &marks[sub]);
     total += marks[sub];  // Sum the marks
  }
```

```
    // Calculate percentage
    percentage = (total / (FULL_MARK * TOT_SUBS)) * 100;

    // Determine grade based on percentage
    if (percentage >= 90) {
        grade = 'A';
    } else if (percentage >= 80) {
        grade = 'B';
    } else if (percentage >= 70) {
        grade = 'C';
    } else if (percentage >= 60) {
        grade = 'D';
    } else if (percentage >= 40) {
        grade = 'E';
    } else {
        grade = 'F';
    }

    // Print the percentage and grade
    printf("Percentage: %.2f%%\n", percentage);
    printf("Grade: %c\n", grade);

    return 0;
}
```

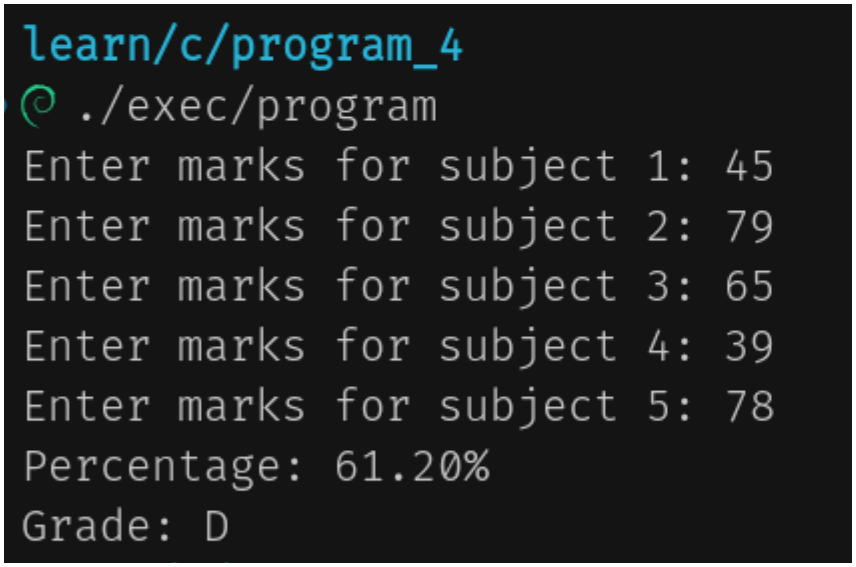
Step 4 . Compiling

```
gcc -Wall -o exec/program src/main.c
```

Step 5. Running the program

```
./exec/program
```

Output


learn/c/program_4
./exec/program
Enter marks for subject 1: 45
Enter marks for subject 2: 79
Enter marks for subject 3: 65
Enter marks for subject 4: 39
Enter marks for subject 5: 78
Percentage: 61.20%
Grade: D