DECISION MAKING PROGRAM

AIM:

To demonstrate the simple decision making program using the the student mark

ALGORITHM:

- Start the program and include the required header file.

- Declare variables to store five subject marks, total, and average.

- Read the marks of five subjects from the user.

- Add all the marks to get the total.

- Divide the total by five to find the average.

- Compare the average with grade limits using `if-else`.

- Display the corresponding grade.

PROGRAM:

```c
/*
* Simple Program to Demonstrate Decision Making
* Author   : MUTHUGANESH S
* Date     : 09/01/2026
* Filename : DecisionMakingProgram.c
* retval   : void
*/

//header file
#include <stdio.h>

//Macros for Grade Limits
#define GRAGE_A 90
#define GRAGE_B 80
#define GRAGE_C 70
#define GRAGE_D 60
#define GRAGE_E 40
#define NUMSUBJECTS 5

int main(){

    int SubjectMark[NUMSUBJECTS];
    int TotalMark=0;
    float AverageMark;

    //Get marks for 5 subjects from user
    for(int i=0;i<NUMSUBJECTS;i++){
        printf("Enter mark for Subject %d: ", i+1);
```

```c
        scanf("%d", &SubjectMark[i]);
        TotalMark += SubjectMark[i];
    }

    //Calculate average mark
    AverageMark = (float)TotalMark / NUMSUBJECTS;

    //Determine grade based on average mark
    if (AverageMark >= GRAGE_A) {
        printf("\nGrade A");
    }
    else if (AverageMark >= GRAGE_B) {
        printf("\nGrade B");
    }
    else if (AverageMark >= GRAGE_C) {
        printf("\nGrade C");
    }
    else if (AverageMark >= GRAGE_D) {
        printf("\nGrade D");
    }
    else if(AverageMark >= GRAGE_E) {
        printf("\nGrade E");
    }
    else {
        printf("\nGrade F");
    }
    return 0;
}
```
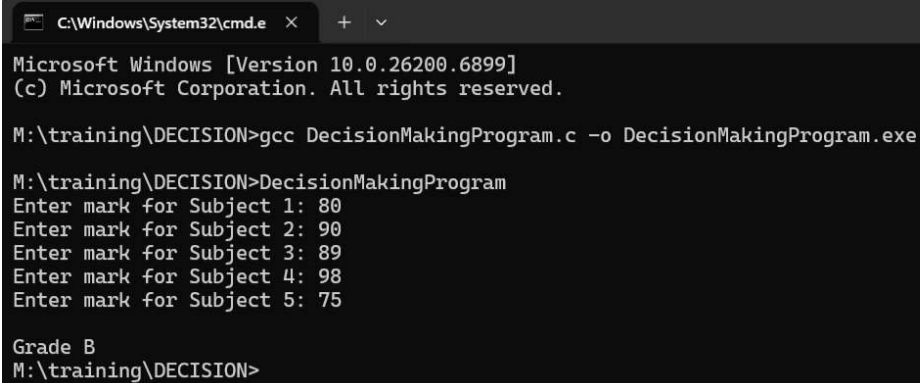
OUTPUT:


```
Microsoft Windows [Version 10.0.26200.6899]
(c) Microsoft Corporation. All rights reserved.

M:\training\DECISION>gcc DecisionMakingProgram.c -o DecisionMakingProgram.exe

M:\training\DECISION>DecisionMakingProgram
Enter mark for Subject 1: 80
Enter mark for Subject 2: 90
Enter mark for Subject 3: 89
Enter mark for Subject 4: 98
Enter mark for Subject 5: 75

Grade B
M:\training\DECISION>
```