## Aim:

```
Write a C Program to display grade based on 6 subject marks using an if-else-if ladder.

marks >= 90% is grade A

marks >= 80% and < 90% is grade B.

marks >= 70% and < 80% is grade C.

marks >= 60% and < 70% is grade D.

marks >= 40% and < 60% is grade E.

marks < 40% is grade Fail.

Sample Input and Output:

Enter the six subjects marks : 60 50 70 90 55 69

Total marks : 394

Percentage : 65.666664

Grade : D
```

## **Source Code:**

```
grade.c
```

```
#include<stdio.h>
#include<math.h>
int main()
   int s 1,s 2,s 3,s 4,s 5,s 6;
   float total, percentage;
   printf("Enter the six subjects marks : ");
   scanf("%d%d%d%d%d%d",&s_1,&s_2,&s_3,&s_4,&s_5,&s_6);
   total=s 1+s 2+s 3+s 4+s 5+s 6;
   printf("Total marks : %.0f\n",total);
   percentage=(total*100)/600;
   printf("Percentage : %f\n",percentage);
   if(percentage>90&&percentage<=100)
     printf("Grade : A\n");
   else if(percentage>80&&percentage<=90)</pre>
     printf("Grade : B\n");
 }
   else if(percentage>=70&&percentage<=80)</pre>
      printf("Grade : C\n");
 }
   else if(percentage>=60&&percentage<70)</pre>
```

```
{
      printf("Grade : D\n");
}
   else if(percentage>=40&&percentage<60)</pre>
      printf("Grade : E\n");
 }
   else
   {
      printf("Grade : Fail\n");
}
}
```

## Execution Results - All test cases have succeeded!

```
Test Case - 1
User Output
Enter the six subjects marks : 60 50 70 90 55 69
Total marks : 394
Percentage : 65.666664
Grade : D
```

```
Test Case - 2
User Output
Enter the six subjects marks : 100 90 28 45 33 80
Total marks : 376
Percentage : 62.666668
Grade : D
```

```
Test Case - 3
User Output
Enter the six subjects marks : 90 89 85 97 79 88
Total marks : 528
Percentage : 88.000000
Grade : B
```

```
Test Case - 4
User Output
Enter the six subjects marks : 20 28 30 25 33 38
Total marks : 174
Percentage : 29.000000
Grade : Fail
```

```
Test Case - 5
User Output
Enter the six subjects marks : 65 70 75 60 80 85
Total marks : 435
```

Percentage : 72.500000 Grade : C

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