**PROGRAM 1**

**MARKS,TOTAL,AVERAGE AND GRADE OF THREE SUBJECTS 7**

#include<stdio.h>

int main()

{

float m1,m2,m3,total,avg;

char grade;

printf("Enter the marks of three subjects\n");

scanf("%f %f %f",&m1,&m2,&m3);

total=m1+m2+m3;

avg=total/3;

printf("The total marks is:%.2f \n",total);

printf("The average is:%.2f \n",avg);

if(avg>=90)

{

grade='A';

}

else if(avg>=80)

{

grade='B';

}

else if(avg>=70)

{

grade='C';

}

else if(avg>=60)

{

grade='D';

}

else if(avg>=50)

{

grade='E';

}

else

{

grade='F';

}

printf("Grade=%c",grade);

if(avg>=50||m1>=50||m2>=50||m3>=50)

{

printf("\nResult is PASS");

}

else

{

printf("\nResult is FAIL");

}

return 0;

}

**Output**

**A**

Enter the marks of three subjects

95

95

97

The total marks is:287.00

The average is:95.67

Grade=A

Result is PASS

**B**

Enter the marks of three subjects

70

80

90

The total marks is:240.00

The average is:80.00

Grade=B

Result is PASS

**C**

Enter the marks of three subjects

70

73

68

The total marks is:211.00

The average is:70.33

Grade=C

Result is PASS

**D**

Enter the marks of three subjects

60

58

62

The total marks is:180.00

The average is:60.00

Grade=D

Result is PASS

**E**

Enter the marks of three subjects

50

52

55

The total marks is:157.00

The average is:52.33

Grade=E

Result is PASS

**F**

Enter the marks of three subjects

40

38

42

The total marks is:120.00

The average is:40.00

Grade=F

Result is FAIL

**PROGRAM 2**

**SIMPLE CALCULATOR**

#include <stdio.h>

int main()

{

float num1,num2,result;

char op;

printf("Simple calculator using switch-case\n");

printf(".............\n");

printf("Enter an operator(+,-,\*,/):\n");

scanf("%c",&op);

printf("Enter two numbers:\n");

scanf("%f %f",&num1,&num2);

switch(op)

{

case'+':

result=num1+num2;

printf("Result=%.2f\n",result);

break;

case'-':

result=num1-num2;

printf("Result=%.2f\n",result);

break;

case'\*':

result=num1\*num2;

printf("Result=%.2f\n",result);

break;

case'/':

if(num2!=0)

{

printf("Result=%.2f\n",num1/num2);

}

else

{

printf("Error!Division by zero is not allowed.\n");

}

break;

default:

printf("Invalid operator!Please use(+,-,\* or /).\n");

}

return 0;

}

**OUTPUT**

**Add**

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

+

Enter two numbers:

45

67

Result=112.00

**Sub**

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

-

Enter two numbers:

34

5

Result=29.00

**Multiply**

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

\*

Enter two numbers:

4

7

Result=28.00

**Divide**

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

/

Enter two numbers:

10

5

Result=2.00

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

/

Enter two numbers:

90

0

Error!Division by zero is not allowed.

**Invalid**

Simple calculator using switch-case

.............

Enter an operator(+,-,\*,/):

&

Enter two numbers:

2

3

Invalid operator!Please use(+,-,\* or /).