

Assignment#1

Programming using C++

Submitted by:

Qazi Khalid Amin

Roll #:1922

Submitted to:

**Sir Zahia ul
Rehman**



Program#1

```
11-RECUR.CPP  [*] Untitled1
1  #include<iostream>
2  using namespace std;
3  int main()
4  {
5      int i; char d;
6      cout<<"Ennter a number:";
7      cin>>i;
8      if(i>=0&&i<=39){
9          cout<<"Grade = F"<<endl;
10         d='F';}
11     else if(i>=40&&i<=49)
12     {
13         cout<<"Grade =E"<<endl;
14         d='E';}
15     else if(i>=50&&i<=59){
16         cout<<"Grade = D"<<endl;
17         d='D';}
18     else if(i>=60&&i<=69){
19         cout<<"Grade = C"<<endl;
20         d='C';}
21     else if(i>=70&&i<=79){
22         cout<<"Grade = B"<<endl;
23         d='B';}
24     else if(i>=80&&i<=89){
25         cout<<"Grade = A"<<endl;
26         d='A';}
27     else if(i>=90&&i<=100){
28         cout<<"Grade =A+"<<endl;
29         d='A+';
```

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30 }
31 else
32 cout<<"wrong input"<<endl;
33 switch(d){
34 case 'F':{
35     cout<<"you Failed";
36     break;}
37 case 'E':{
38     cout<<"Need hardworking"<<endl;
39     break; }
40 case 'D':{
41     cout<<"keeeep hard working"<<endl;
42     break;}
43 case 'C':{
44     cout<<"better"<<endl;
45     break;}
46 case 'B':{
47     cout<<"good"<<endl;
48     break;}
49 case 'A':{
50     cout<<"excellent"<<endl;
51     break; }
52     default:
53     cout<<"Super"<<endl;}
54 }
```

Program#2

[*] Q1.cpp

```
1  #include<iostream>
2  using namespace std;
3  int Addition();
4  int Substraction();
5  int Multiplication();
6  int Division();
7  int Power();
8  int calculate(int,int );
9  int x,y;
10 int main(){
11     int a;
12     cout<<"\n\n\n\t\t\t*****"<<endl;
13     cout<<"\t\t\t\t\tMAIN MENU"<<endl;
14     cout<<"\t\t\t\t\t*****"<<endl;
15     cout<<"\t\t\t\t\t1)Addition"<<endl;
16     cout<<"\t\t\t\t\t2)Substraction"<<endl;
17     cout<<"\t\t\t\t\t3)Multiplication"<<endl;
18     cout<<"\t\t\t\t\t4)Division"<<endl;
19     cout<<"\t\t\t\t\t5)Power"<<endl;
20     cout<<"\t\t\t\t\t*****"<<endl;
21     cout<<"Enter your choice";
22     cin>>a;
23     if(a==1){
24         Addition();}
25     else if(a==2){
26         Substraction();}
27     else if(a==3){
28         Multiplication();}
29     else if(a==4){
30         Division(); }
31     else if(a==5){
32         Power();}
33     }
34     int Addition(){
35         cout<<"Enter a first number:";
36         cin>>x;
37         cout<<"Enter a second number:";
38         cin>>y;
39         cout<<"Sum of two number is"<<x+y<<endl;}
40     int Substraction(){
41         cout<<"Enter a first number:";
42         cin>>x;
43         cout<<"Enter a second number:";
44         cin>>y;
45         cout<<"Substraction of two number is"<<x-y<<endl;}
46     int Multiplication(){
47         cout<<"Enter a first number:";
48         cin>>x;
49         cout<<"Enter a second number:";
50         cin>>y;
51         cout<<"Multiplication of two number is"<<x*y<<endl;}
52     int Division(){
53         cout<<"Enter a first number:";
54         cin>>x;
55         do{
56             cout<<"Enter a second number:";
57             cin>>y;
58             }while(y==0);
59         cout<<"Division of two number is"<<x/y<<endl;}
60     int Power(){
61         cout<<"Enter a base:";
62         cin>>x;
63         cout<<"Enter a power:";
64         cin>>y;
65         cout<<"Division of two number is"<<calculate(x,y)<<endl;}
66     int calculate(int x, int y){
67         int f=1;
68         if(y==1)
69             return 1;
70         else
71             {
72                 for(int i=1;i<=y;i++){
```

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        f=f*x;
    }
    return f;}
}
```