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Batch : A Experiment no.: 01

Title : C++ program to implement simple arithmetic calculator

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//Program:

#include<iostream> using namespace std; class Mycalc

{

int a,b; public:

void input(); int add();

int sub();

int mul();

int div();

int sqr(); int fact();

};

void Mycalc::input()

{

cout<<" Enter Value of a="; cin>>a;

cout<<"\n Enter Value of b=";

cin>>b;

}

int Mycalc::add()

{

int c; c=a+b;

cout<<"Addition= "<<c<<endl; return c;

}

int Mycalc::sub()

{

int c; c=a-b;

cout<<"Subtraction= "<<c<<endl; return c;

}

int Mycalc::mul()

{

int c; c=a\*b;

cout<<"Multiplication= "<<c<<endl; return c;

}

int Mycalc::div()

{

int c; c=a/b;

cout<<"Division= "<<c<<endl; return c;

}

int Mycalc::sqr()

{

int c; c=a\*a;

cout<<"Square of a= "<<c<<endl; return c;

}

int Mycalc::fact()

{

int i,fact=1,facto=1; for(i=1;i<=a;i++)

{

fact=fact\*i;

}

cout<<"factorial of a="<<fact<<endl; for(i=1;i<=b;i++)

{

facto=facto\*i;

}

cout<<"factorial of b="<<facto;

}

int main()

{

Mycalc ob; int ch,c; while(1)

{

cout<<"1.Addition :"<<endl; cout<<"2.Subtraction :"<<endl;

cout<<"3.Multiplication:"<<endl; cout<<"4.Division :"<<endl; cout<<"5.Square :"<<endl; cout<<"6.Factorial :"<<endl; cout<<"enter choice:"<<endl; cin>>ch;

switch(ch)

{

case 1:ob.input(); c=ob.add(); break;

case 2:ob.input(); c=ob.sub(); break;

case 3:ob.input(); c=ob.mul(); break;

case 4:ob.input(); c=ob.div(); break;

case 5:ob.input(); c=ob.sqr(); break;

case 6:ob.input(); c=ob.fact(); break;

}

}

return 0;

}

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**OUTPUT:**

1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 1

Enter Value of a=6

Enter Value of b=2 Addition= 8 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 2

Enter Value of a=41

Enter Value of b=26 Subtraction= 15 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 3

Enter Value of a=45

Enter Value of b=62 Multiplication= 2790 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 4

Enter Value of a=100

Enter Value of b=25 Division= 4 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 5

Enter Value of a=15

Enter Value of b=10 Square of a= 225 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice: 6

Enter Value of a=6

Enter Value of b=5 factorial of a=720 factorial of b=120 1.Addition : 2.Subtraction : 3.Multiplication: 4.Division :

1. Square :
2. Factorial : enter choice:

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