Project 1

Part 1A

#include<iostream>

using namespace std;

int main()

{

int number1;

int number2;

cout<<"enter two integers";

cin>>number1>>number2;

cout<<"the sum is"<<number1+number2

<<"the product is"<<number1\*number2

<<"the difference is"<<number1-number2

<<"the quotient is"<<number1/number2<<endl;

system("pause");

}

Part 1B

#include<iostream>

using namespace std;

int main()

{

cout<<"\*\*\*\*\*\*\*\*\n\*\*\*\*\*\*\*\*\n\*\*\*\*\*\*\*\*\n"

<<"\*\*\*\*\*\*\*\*\n\*\*\*\*\*\*\*\*\n\*\*\*\*\*\*\*\*\n"

<<"\*\*\*\*\*\*\*\*\n\*\*\*\*\*\*\*\*\n";

cout<<endl;

system("pause");

}

Part 1C

#include<iostream>

using namespace std;

int main()

{

int number;

number=0;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=1;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=2;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=3;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=4;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=5;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=6;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=7;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=8;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=9;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n";

number=10;

cout<<"integer\tsquare\tcube\n";

cout<<number<<'\t'<<number\*number<<'\t'

<<number\*number\*number<<"\n"<<endl;

system("pause");

}

Part 1D

Account 1.h

class Account

{

public:

Account(int);

void credit(int);

void debit(int);

int getBalance();

private:

int balance;

};

Account 2.cpp

#include<iostream>

#include "Account 1.h"

using namespace std;

Account::Account(int initialBalance)

{

balance=0;

if (initialBalance > 0)

balance=initialBalance;

if (initialBalance < 0)

cout<<"Error:Initial balance cannot be negative.\n"<<endl;

};

void Account::credit(int amount)

{

balance=balance+amount;

}

void Account::debit(int amount)

{

if (amount>balance)

cout<<"Debit amount exceeded account balance.\n"<<endl;

if (amount<=balance)

balance=balance-amount;

}

int Account::getBalance()

{

return balance;

};

Exercise 12.cpp

#include<iostream>

#include"Account 1.h"

using namespace std;

int main()

{

Account account1(50);

Account account2(25);

cout<<"account1 balance:$"<<account1.getBalance()<<endl;

cout<<"account2 balance:$"<<account2.getBalance()<<endl;

int withdrawalAmount;

cout<<"\nEnter withdrawal amount for account1:";

cin>>withdrawalAmount;

cout<<"\nattempting to subtract"<<withdrawalAmount<<"from account1 balance\n\n";

account1.debit(withdrawalAmount);

cout<<"account1 balance:$"<<account1.getBalance()<<endl;

cout<<"account2 balance:$"<<account2.getBalance()<<endl;

cout<<"\nEnter withdrawal amount for account2:";

cin>>withdrawalAmount;

cout<<"\nattempting to subtract"<<withdrawalAmount<<"from account2 balance\n\n";

account2.debit(withdrawalAmount);

cout<<"account1 balance:$"<<account1.getBalance()<<endl;

cout<<"account2 balance:$"<<account2.getBalance()<<endl;

system("pause");

}