Project 2

Part 2A

#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");

}

Part 2B

#include<iostream>

using namespace std;

int main()

{

double radius;

double pi=3.14159;

cout<<"Enter the radius:";

cin>>radius;

cout<<"The diameter is"<<radius\*2.0;

cout<<"nThe circumference is"<<2.0\*pi\*radius;

cout<<"\nThe area is"<<pi\*radius\*radius<<endl;

system("pause");

}

Part 2C

#include<iostream>

using namespace std;

int main()

{

for (int row=1;row<=5;row++)

{

for(int space=1;space<=5-row;space++)

cout<<' ';

for (int asterisk=1;asterisk<=2\*row-1;asterisk++)

cout<<"\*";

cout<<'\n';

}

for (int row=4;row>=1;row--)

{

for (int space=1;space<=5-row;space++)

cout<<' ';

for (int asterisk=1;asterisk<=2\*row-1;asterisk++)

cout<<'\*';

cout<<'\n';

}

cout<<endl;

system("pause");

}

Part 2D

#include<iostream>

using namespace std;

bool isPerfect(int);

void printSum (int);

int main()

{

cout<<"Perfect integers between 1 and 1000:"<<endl;

for (int j=2;j<=1000;j++)

{

if(isPerfect(j))

printSum(j);

}

cout<<endl;

}

bool isPerfect(int value)

{

int factorSum=1;

for(int i=2;i<=value/2;i++)

{

if(value % i==0)

factorSum +=i;

}

return factorSum==value;

}

void printSum(int value)

{

cout<<value<<"=1";

for (int i=2;i<=value/2;i++)

{

if (value % i==0)

cout<<"+"<<i;

}

cout<<endl;

system("pause");

}