#include <iostream>

using namespace std;

class c1

{

public:

c1();

~c1();

void input(float \*);

float process(float \*);

void output(float \*, float \*);

private:

};

c1::c1()

{

cout<<"\* \* \* START OF PROGRAM \* \* \* \n\n";

}

c1::~c1()

{

cout<<"\n \* \* \* END OF JOB \* \* \*";

}

void c1::input(float \*r)

{

cout<<"\nENTER RADIUS VALUE = ";

cin>>\*r;

}

float c1::process(float \*r)

{

float diameter = 0.0;

diameter = \*r \* 2;

return diameter;

float area = 0.0;

area = 3.14 \* \*r \* \*r;

}

void c1::output(float \*diameter, float \*r)

{

cout<<"\nDIAMETER = " << \*diameter;

cout<<"\nAREA OF CIRCLE = "<<\*diameter/2 \* \*diameter/2 \* 3.14;

}

int main()

{

c1 o1;

float r = 0;

float diameter = 0;

float area = 0;

o1.input(&r);

diameter = o1.process(&r);

area = o1.process(&r);

o1.output(&diameter,&r);

}

**RESULTS**

**\* \* \* START OF PROGRAM \* \* \***

**ENTER RADIUS VALUE = 12**

**DIAMETER = 24**

**AREA OF CIRCLE = 452.16**

**\* \* \* END OF JOB \* \* \***

The requirements for this program was to find the diameter and the area of the circle. To achieve this users need to input the radius value. Then the radius is plugged into the diameter and area formula separately. This program uses pointers in the radius value as it is plugged into each formula.