OBJECT ORIENTED PROGRAMMING WITH C++

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1.program to print names of students by creating the class if number and name is passed while creating the object of student class,then name should be unknown otherwise name should be equal to the string value passed while creating an object

Program:

#include<iostream>

#include<string.h>

using namespace std;

class student

{

int n;

char\* name;

public:

student()

{

n = 0;

cout<<"name"<<"unknown";

}

student(int x,char\* y)

{

n= x;

name = y;

}

void display()

{

cout<<"n "<<n<<endl;

cout<<"name "<<name<<endl;

}

};

main()

{

student s(10,"pain");

student s1(40,"mark");

student s2(80,"arther");

student s3(67,"jenny");

s.display();

s1.display();

s2.display();

s3.display();

}

Output:

N= 10

Name: pain

n= 40

name: mark

n= 80

name: arther

n= 67

name: jenny

2.program to find area of rectangle using class

Program:

#include<iostream>

using namespace std;

class rectangle

{

int l,b,a,x,y;

public:

rectangle()

{

}

rectangle(int x,int y)

{

l=x;

b=y;

}

rectangle(int x)

{

x=l;

}

void calculate()

{

a=l\*b;

cout<<"area of rectangle is:"<<a;

}

};

main()

{

rectangle r(6,6);

r.calculate();

}

Output:

area of rectangle is:36

3.program to create class Add Amount and data members with initial value Rs.50 .Now make to constructors one with no parameters and another with one parameter in function to add money

Program:

#include<iostream>

using namespace std;

class AddAmount

{

int amount;

public:

AddAmonut()

{

amount = 50;

}

AddAmount(int x)

{

amount = x+50;

}

void display()

{

cout<<"amount is:"<<amount;

}

};

int main()

{

AddAmount a(34);

a.display();

}

Output:

amount is:84

4.create a class (print number) to print various numbers of data types by creating different functions

Program:

#include<iostream>

using namespace std;

class printnumber

{

int a;

char b;

float c;

double d;

bool e;

public:

int printn(int x)

{

a = x;

return x;

}

char printn(char y)

{

b = y ;

return y;

}

float printn(float z )

{ c = z;

return z;

}

double printn(double s)

{ d = s;

return s;

}

bool printn(bool f)

{

e = f;

return f;

}

};

main()

{

printnumber p;

cout<<"\n integer is:"<<p.printn(3);

cout<<"\n charactor is:"<<p.printn('k');

cout<<"\n float is:"<<p.printn(3.5);

cout<<"\n double is:"<<p.printn(7.89);

cout<<" \n bool is:"<<p.printn(true);

}

Output:

integer is:3

charactor is:k

float is:3.5

double is:7.89

bool is:1

5.program to display an integer and character using two functions having same name but with different sequences

Program:

#include<iostream>

using namespace std;

class print{

public:

void output(int a, char b[20])

{

cout<<"Integer is "<<a<<endl;

cout<<"Character is "<<b<<endl;

}

void output(char b[20], int a)

{

cout<<"Character is "<<b<<endl;

cout<<"Integer is "<<a<<endl;

}

};

int main()

{

print obj;

obj.output("vamsi ", 10);

obj.output(10, " vamsi ");

}

Output:

Character is vamsi

Integer is 10

Integer is 10

Character is vamsi