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Reg# BSE203003

Subject: OOP LAB

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Practice Task 1:

```cpp
#include <iostream>
#include <string>
using namespace std;
class entertainment
{
        string title;
        string release_date;
        string *genre; //dynamic array data member
        string type;
        int runtime;
        string country;
        string *actors; //dynamic array data member
        float rating;
public:
        entertainment(string a, string b, string c, float d, string e, string f, string
g, int h)
        {
                genre = new string;
                *genre = a;
                actors = new string;
                *actors = b;
                country = c;
                rating = d;
                title = e;
                release_date = f;
                type = g;
                runtime = h;
        }

        entertainment(entertainment &e1)
        {
                genre = e1.genre;
                country = e1.country;
                rating = e1.rating;
                title = "flash";
                type = "series";
                actors = new string;
                *actors = "Grant Gustin,Candice Pathon,Carlos Valdes";
                release_date = "7-october-2014";
                runtime = 147;
        }
        void display()
        {
                cout << "\nTitle:" << title;
                cout << "\nRelease Date:" << release_date;
                cout << "\nGenre:" << *genre;
                cout << "\nType:" << type;
                cout << "\nRuntime(in minutes)" << runtime;
                cout << "\nCountry:" << country;
                cout << "\nActors:" << *actors;
                cout << "\nRating(out of 10):" << rating;
        }
};
int main()
{
        entertainment obj1("Action and thriller", "Tom cruise,Henry Cavill,Vanessa
Kirby", "U.S.A", 7.7, "Mission Impossible-Fallout", "27-July-2018", "Movie", 147);
        entertainment obj2(obj1);// ("Grant Gustin,Candice Pathon,Carlos Valdes", "The
Flash", "7-october-2014", "series", 147);
```

```cpp
        cout << "\nData of Object 1";
        obj1.display();
        cout << "\nData of OObject 2";
        obj2.display();
}
```



```
Data of Object 1
Title:Mission Impossible-Fallout
Release Date:27-July-2018
Genre:Action and thriller
Type:Movie
Runtime(in minutes)147
Country:U.S.A
Actors:Tom cruise,Henry Cavill,Vanessa Kirby
Rating(out of 10):7.7
Data of OObject 2
Title:flash
Release Date:7-october-2014
Genre:Action and thriller
Type:series
Runtime(in minutes)147
Country:U.S.A
Actors:Grant Gustin,Candice Pathon,Carlos Valdes
Rating(out of 10):7.7
C:\Users\zohai\source\repos\Project3\Debug\Project3.exe (process 11828) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the conso
le when debugging stops.
Press any key to close this window . . .
```

Practice Task 2:

```cpp
#include<iostream>
#include<string>
using namespace std;
class polygon {
        float length;
        float *width;

public:
        polygon(float w, float l)
        {
                width = new float;
                *width = w;
                length = l;
        }
        polygon(polygon &obj)
        {

                width = obj.width;
        }
        void showall()
        {
                cout << "\nLength" << length;
                cout << "\nWidth=" << *width;
        }

};
int main()
{
        polygon one(2.5, 2);
        polygon two( one);
        two.showall();

}
```
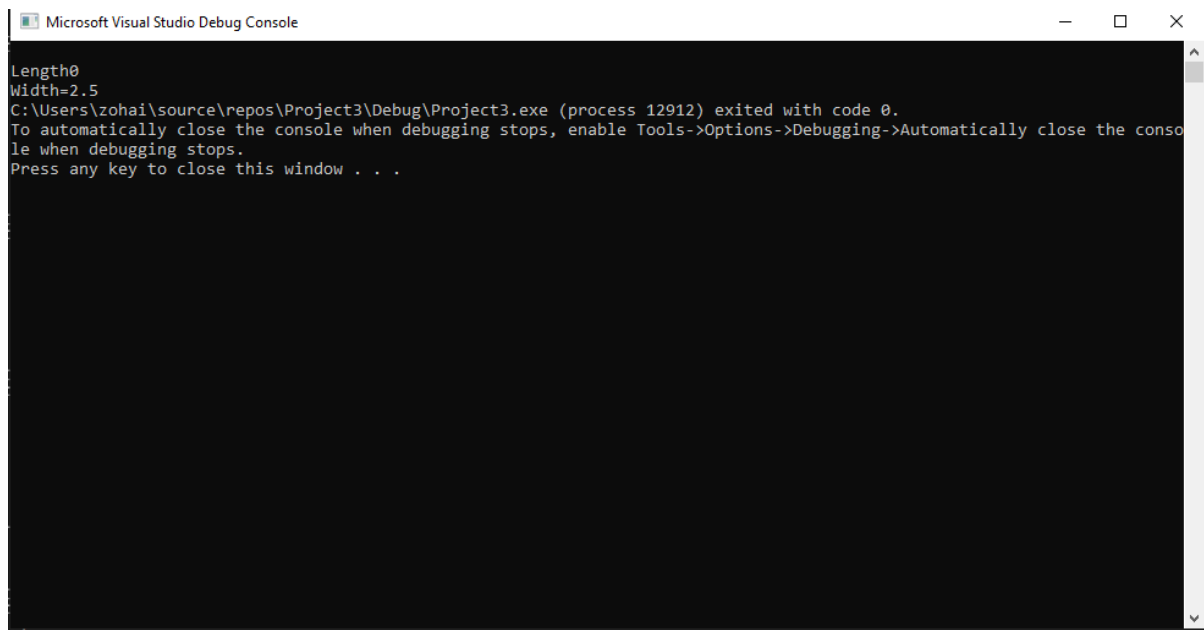
3

As Shown in output the copy constructer is only copying pointer variables