

**Exercise 9: To construct a cpp program using constructor and destructor.**

**Source Code:**

```
#include<iostream>

using namespace std;

class code
{
    int id;
    int count;
public:
    code()
    {
        cout<<"Default constructor called\n"; id=0;
        cout<<"id="<<id<<endl;
    }
    code(int a)
    {
        cout<<"Parameterized constructor called\n"; id=a;
        cout<<"id="<<id<<endl;
    }
    code(code&x )
    {
        cout<<"copy constructor called\n"; id=x.id;
        cout<<"id="<<id<<endl;
    }
    void display()
    {
        cout<<"id="<<id<<endl;
    }
    ~code()
    {
        cout<<"Object Destroyed"<<endl;
    }
}
```

```

}
};
int main()
{
code a(100);//calls parameterized constructor
code b(a); //calls copy constructor
code c(a); //calls copy constructor
code d;//calls default constructor
cout<<"\n For object d id="; d.display();
cout<<"\n For object a id="; a.display();
cout<<"\n For object b id="; d.display();
cout<<"\n For object c id="; d.display();
return 0;
}

```

## **OUTPUT:**

**Parameterized constructor called**

**id=100**

**copy constructor called**

**id=100**

**copy constructor called**

**id=100**

**Default constructor called**

**id=0**

**For object d id=id=0**

**For object a id=id=100**

**For object b id=id=0**

**For object c id=id=0**

**Object Destroyed**

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