Object Oriented Programming

Practice Session 2

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Question 3:

Correct the syntactical and logical errors in the following and explain program:

```
class test
{
 Private:
     int m;
 public:
     void getdata()
     {
        cout<<“Enter No:”;
        cin>> m;
    }
     void display()
     {
        cout<<m;
     }
};
```

```
main()
{
     test T;
     T->getdata();
     T->display();
     test *p;
     p=new test;
     p.getdata();
     (*p).display();
}
```

Question 3: Solution

Correct the syntactical and logical errors in the following and explain program:

```
class test
{
 Private:
     int m;
 public:
     void getdata()
     {
        cout<<“Enter No:”;
        cin>> m;
    }
     void display()
     {
        cout<<m;
     }
};
```

```
main()
{
     test T;
     T ->getdata();
     T ->display();
     test *p;
     p=new test;
     p.getdata();
     (*p).display();
}
```

```
T.getdata();
T.display();

p->display();

delete p;
```

Question 4:

If a class declares a variable static, this means:

(a) Each instance of a class will have its own copy of the variable.

(b) Changing the variable in one instance will have no effect on other instances of the class.

(c) There will be only one instance of the variable initialized for all classes.

(d) Every instance of the class must consider the value of the static variable before initializing.

Question 4: Solution

If a class declares a variable static, this means:

(a) Each instance of a class will have its own copy of the variable.

(b) Changing the variable in one instance will have no effect on other instances of the class.

(c) **There will be only one instance of the variable initialized for all classes.**

(d) Every instance of the class must consider the value of the static variable before initializing.

Question 5

In case of a copy constructor, which of the following is true?

(a) Used to instantiate an object from another existing object

(b) To copy one object to another existing object.

(c) Can be a substitute for a ‘=’ operator.

(d) All of the above.

Question 5: Solution

In case of a copy constructor, which of the following is true?

(a) Used to instantiate an object from another existing object

(b) To copy one object to another existing object.

(c) Can be a substitute for a ‘=’ operator.

(d) **All of the above.**

Question 6:

```
class Base
{
	public : int a;
	protected: int b;
	private: int c;
};

class Derived: Base
{
	int d;
	friend Friend;
};
class Friend
{
	Derived derived;
};
```

Which of the variables among a, b, c **and** d **can be accessed in "Friend"?**

Question 6: Solution

```
class Base
{
        public : int a;
        protected: int b;
        private: int c;
};

class Derived: Base
{
        int d;
        friend Friend;
};
class Friend
{
        Derived derived;
};
```

Which of the variables among a, b, c **and** d **can be accessed in "Friend"?**

Error – Access specifier is missing
Error – “class” key word missing in firend

Question 7:

```
class Base
{
        public : int a;
        protected: int b;
        private: int c;
};

class Derived: public Base
{
        int d;
        friend class Friend;
};
class Friend
{
        Derived derived;
};
```

Which of the variables among a, b, c **and** d **can be accessed in "Friend"?**

Question 7: Solution

```
class Base
{
	public : int a;
	protected: int b;
	private: int c;
};

class Derived: public Base
{
	int d;
	friend class Friend;
};
class Friend
{
	Derived derived;
};
```

Which of the variables among a, b, c **and** d **can be accessed in "Friend"?**

a, b and d

Question 8:

```
class obj
{
public :
    obj(){cout<<"in ";}
    ~obj(){cout<<"in ";}
};

int main()
{
    obj A,B,C,D,E; obj F;
    {
        obj G;
    }
    cout<<count;
    {
        obj H;
    }

    return 0;
}
```

What is the output of this code?

Question 8: Solution

```
class obj
{
public :
    obj(){cout<<"in ";}
    ~obj(){cout<<"in ";}
};

int main()
{
    obj A,B,C,D,E; obj F;
    {
        obj G;
    }
    cout<<count;
    {
        obj H;
    }

    return 0;
}
```

What is the output of this code?

in in in out in out out out

Object Oriented Programming

The End

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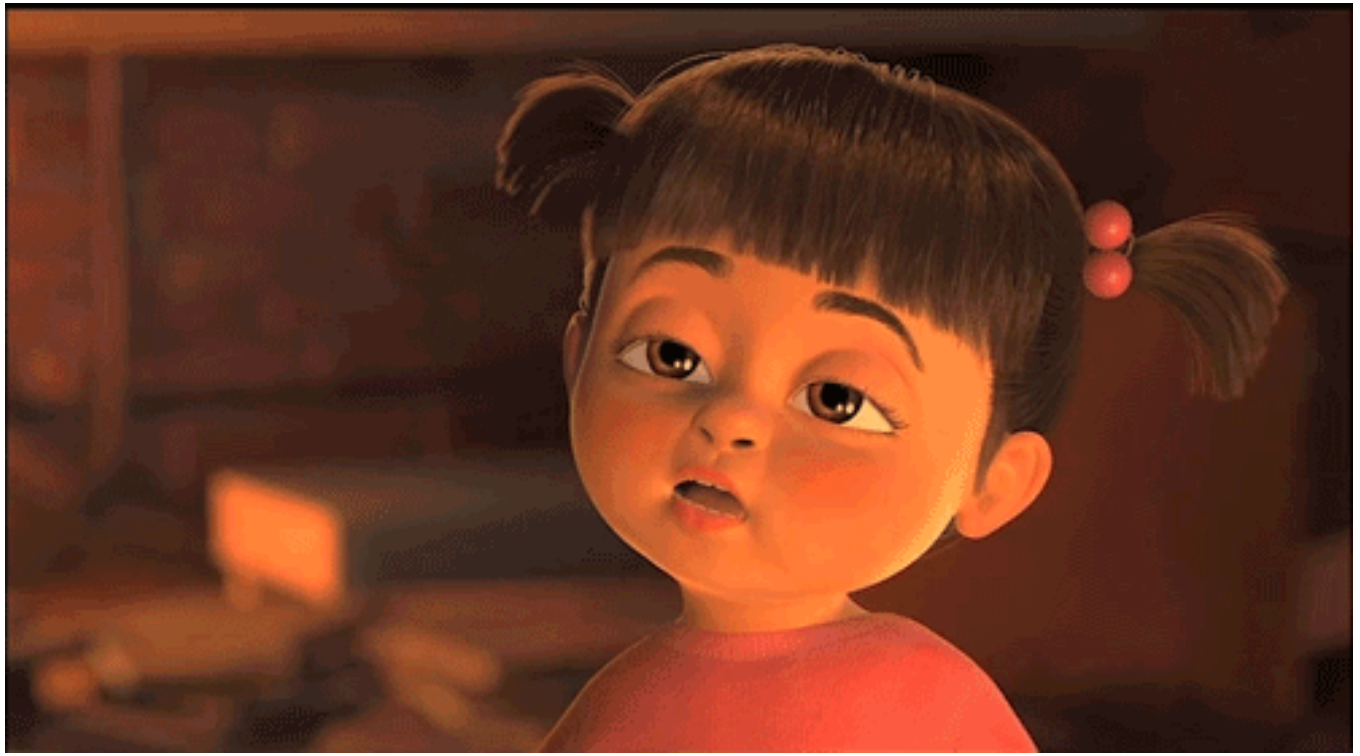
Thanks a lot



If you are taking a Nap, **wake up**.....Lecture Over