

```

#include<iostream>

using namespace std;

int Capital=50; //global scope operator

class companyX{
    int Capital=50; //global variable
    int RAmount;
    public:
    void Require(int x){
        RAmount = x;
    }
    int Allocate(){
        Capital=Capital-RAmount;
        return Capital;
    }
}

```

//(1.1)Class variables are shared among instances

//(2.1)but can be overridden per instance,

//(1.2)while static variables belong strictly to the class and remain unchanged across instances.

//(2.2)Static variables do not allow per-instance modifications, whereas class variables can be shadowed by instance attributes.

```
};
```

```

int main(){
    companyX A,B,C;
    A.Require(15);
    int BalA=A.Allocate();
    B.Require(10);
    int BalB=B.Allocate();
    C.Require(9);
    int BalC=C.Allocate();
    cout<<BalA<<endl;
    cout<<BalB<<endl;
}

```

```

        cout<<BalC<<endl;

        return 0;
    }

//global variables equal to static variable
//difference between this is ()
//scope of a static variable is limited
//but the scope of a class is entire the part

```

```

// static variable are accessible to all of the class (TRUE )

```

```

#include <iostream>

```

```

using namespace std;

```

```

int name=79;//global scope operator

```

```

class variable{
    int name=79; //global variable
    int rlo;

    public:
    void require(int x){
        rlo=x+x;
    }
    int allocate(){
        name=name/rlo;
        return name;
    }
};

```

```

int main(){
    variable x,y;

```

```
    a.require(20);  
    int result1=a.allocate();  
    cout<<"result2"<<result1<<endl;  
b.require(20);  
    int result2=a.allocate();  
    cout<<"result2="<<result2<<endl;  
    return 0;  
}
```