```cpp
// Static Data members
#include<iostream>
class student
{
 public:
   static int x;
   int y = 10;
   void fun()
   {
     std::cout<<y<<"\t"<<x<<std::endl;
   }
};
int student::x=10;
int main()
{
   student obj,obj1;
   for(int i=10;i>0;i--)
   {
     obj.fun();
     student::x--;
   }
 obj1.fun();
   return 0;
}


//static member function
# include<iostream>
class Demo
{
 public:
 int x = 10;
 static int y;
 void fun()
 {
  std::cout<<x<<"\t"<<y<<std::endl;
 }
 static void gun()
 {
  std::cout<<y;
  //std::<<cout<<x;        //shows error for this line, non static data member in
staic function
 }
};
int Demo::y=20;
int main()
{
 Demo obj;
 obj.fun();  // allowed
 obj.gun();  // allowed
 Demo::gun(); // allowed
}
```