# The static keyword is used as a modifier on variables, methods. When a data member is declared as static, only one copy of the data is maintained for all objects of the class. A static member is shared by all objects of the class.

**Static member**

* Static members are often called as class members, such as class variable and class methods or function.
* The static members can be called before the creation of object of class.
* Static block code executed only once, when the class is loaded.
* Static members – static variables and static methods.

**Syntax:**

1. Static variables:  
   **Static data\_type variable­\_name;**
2. Static method :  
   **static data\_type method name()**

**{**

**//method body**

**}**

**Example:**

#include<iostream>

using namespace std;

**//class declaration**

class staticDemo

{  
 private:

**//static variable declaration**

Static int sum;

**//normal variable declaration**

int x;

public:  
 **//Constructor of the class**

staticDemo()

{  
 sum=sum+1;

x=sum;

}

**//Static function staticFunction() defined with keyword static**

static void staticFunction()

{

cout<<”\nResult is:”<<sum;

}

**//Normal member function normalFunction Number()**

void normalFunctionNumber()

{

cout<<”\nNumber is :” <<x;

}  
};

int staticDemo : sum=0;

**//Declaration of main method**

int main()

{

cout<<”This is how static method and variable work:\n”;

**//creation of object**

staticDemo stat;

**//Static function staticFunction() accessed using class name staticDemo and the scope resolution operator ::**

staticDemo:: staticFunction();

staticDemo stat1, stat2, stat3;

staticDemo :: staticFunction();

stat.normalFunctionNumber();

**//Normal member function accessed using object stat and the dot member access operator.**

stat1.normalFunctionNumber();

stat2.normalFunctionNumber();

stat3.normalFunctionNumber();

}

**Output:**

This is how static member and variable work:  
Result is :1

Result is :4

Number is :1

Number is :2

Number is :3

Number is :4