SCOPE RESOLUTION OPERATOR

Operator- ::

Applications and their syntax:

1.) In order to access a global variable which has same name as local variable.

Ex. #include<iostream>

```
using namespace std;

int n;

int main()
{
  int n=2;
  cout << "global x is " << ::n; // n=0
  cout << "\nlocal x is " << n;   // n=2
  return 0;
}
```

2.) To define a function outside a class

Ex. #include<iostream>

```
using namespace std;

class fn
{
public:
   int fun();
};

int fn::fun()
{
   cout << "Hi";
}

int main()
{
   fn a;
   a.fun(); // print Hi
   return 0;
}
```

3.) Multiple inheritance

Ex.

```
#include<iostream>
using namespace std;

class one
{
protected:
   int x;
public:
   one() { x = 10; }
};

class two
{
protected:
   int x;
public:
   two) { x = 20; }
};

class three: public one, public two
{
public:
  void fun()
  {
    cout << "one’s x is " << one::x;
    cout << "\ntwo's x is " << two::x;
  }
};

int main()
{
   three 0;
   o.fun();
   return 0;
}
```

4.) For namespace

Ex:

```
#include<iostream>
int main(){
```

```
    std::cout << "Hi" << std::endl;
  }
```
5.) To use a class in another class

Ex:

```
#include<iostream>
using namespace std;

class out
{
public:
      int x;
      class in
      {
      public:
           int x;
           static int y;
     };
};
int out::in::y = 5;
 int main(){
    outside A;
    outside::inside B;

}
```