

static class vs singleton class
abstract class vs interface
eager loading vs lazy loading vs deferred execution
content negotiation

using System;

```
public class Program
{
    static bool SomeMethod1()
    {
        Console.WriteLine("Method 1");
        return false;
    }

    static bool SomeMethod2()
    {
        Console.WriteLine("Method 2");
        return true;
    }

    static void Main()
    {
        if (SomeMethod1() && SomeMethod2())
        {
            Console.WriteLine("the if block has was executed");
        }
    }
}
```

--output--

output will be Method 1 and Method 2. but not print the : "the if block has was executed"

//tell what output will be for below statements

```
var a = 1;
a = "Hello";
Console.WriteLine(a);
dynamic a = 1;
a = "Hello";
Console.WriteLine(a); //output Hello
```

//Call Base class Print method and child class print method

```
-
interface A
{
    void print();
}
```

```
interface B
{
    void print();
}
```

```

}

Class C:A,B
{
void A.print(){
    Console.WriteLine("A interface");
}
void B.print(){
    Console.WriteLine("B interface");
}
}

public static void Main()
{
    C c = new C();
    ((A)c).print();
    ((B)c).print();
}

```

Output:

Call Base class Print method and child class print method

//Call Base class Print method and child class print method

```

-
class Program
{
    static void Main()
    {
        int[] arr = { 1, 2, 3 };
        var query = arr.Select(n =>
        {
            Console.Write(n + " ");
            return n * 2;
        });
        Console.WriteLine("A");
        foreach (var x in query)
            Console.Write(x + " ");
    }
}

```

1 2 3

A

2 4 6

//How To find the 3rd highest salary in an employee table

```

-
Emp
EmpID  Name  Sal  year
1      X    10K  2022
2      Y    8K   2021
1      X    15K  2021
3      Z    9K   2020

```

3	Z	12K	2021
2	Y	9K	2022

```
select salary from (
select salary, dense_rank() over(order by salary desc) as salRank from Emp
) where salRank = 3
```

//WAQ to find the Employee whose earning more than their Manager

```
-
EmpId      Name      ManagerId  Salary
1          Alice      NULL       10000
2          Bob        1          12000
3          Charlie    1          8000
4          David      2          7000
5          Evans      3          9000
```

```
select salary from Emp e1 left join Emp e2 on e1.EmpId = e2.EmpId where
e1.Salary > e2.Salary
```

-

We have a application a and application b and
when db data sync Going on at that time api getting slow,
how to resolve this issue in .net

We have a stored procedure and we are running in MS SQL,
it's some time throwing time out error but sometime it working properly.
How to resolve this.