

Does b, the instance of ClassB, have an instance variable i accessible?

Since the variable 'i' is private in class A, it cannot be accessed and used in class B. If we change private to public, then ClassB can access it

Is the first call to Console.WriteLine in PrintResults in ClassB legal?

use Console.WriteLine in PrintResults is not legal in ClassB, because the variable 'i' in class A is private, so class B can't access it and use it.

Is the second call to Console.WriteLine in PrintResults in ClassB legal?

use Console.WriteLine in PrintResults is not legal in ClassB, because the variable 'i' in class A is private, so class B can't access it and use it.

Explore the output and explain the difference in the behaviour of the two classes/

Class A is not a subclass, but it is a class. Only the variables and functions of class A are used in class A. Class A cannot use the functions and variables of class B. Class B is a subclass, so it can use the variables and functions of class B along with the non-private variables and functions of class A.

```
using System;
using System.Collections.Generic;
using System.Linq;
using System.Text;
using System.Threading.Tasks;

namespace Overloading
{
    class ClassA
    {
        //private int i = 10 change to the protected int i=10
        protected int i = 10;

        //protected change to the public int Sum(int j)
        public int Sum(int j)
        {
            return i + j;
        }

        public int Product(int j)
        {
            return i * j;
        }

        public virtual double Division(int j)
        {
            return i / j;
        }
    }
}
```