Question 6

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

Since “I” is declared as private in ClassA, it is not accessible in ClassB.

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

The first call attempts to print out the value of “I”, however, since “I” is inaccessible, it is not legal.

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

The second call attempt only requires the variable “j” which is accessible, which means it is legal.

A screenshot of a computer program

Description automatically generated

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

The main difference between class A and B is that class B inherits some variables and methods from its parent class; class A, such as integer ‘I’, Sum(), Product() and Division().

Another minor difference between class A and B is seen in the Division() method, where class A declares the variable as an integer while class B declares the variable as a double using the override function.