

Question 6

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

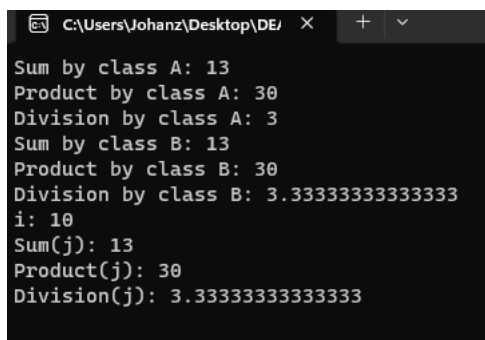
Since "i" is declared as private in ClassA, it is not accessible in ClassB.

- 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.



```
C:\Users\Johanz\Desktop\DEJ >
Sum by class A: 13
Product by class A: 30
Division by class A: 3
Sum by class B: 13
Product by class B: 30
Division by class B: 3.33333333333333
i: 10
Sum(j): 13
Product(j): 30
Division(j): 3.33333333333333
```

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.