### **Return Errors**

As we mentioned before, we don't like surprises — they lead to mistakes. So, when we call a method, we'd like to know what type of value will be returned. This is done in the method definition.

The method definition must contain the type of the return value: if a method returns an integer, its return type must be int; if it returns text, it must be string, and so on. If the method returns nothing, use void.

If a method returns a type different from its stated return type, it will throw an error. Here are some common errors you may see —

This error means you must state a return type before the method name:

### error CS1520: Method must have a return type

This error means that your method doesn't return a value, when it should:

## error CS0161: [MethodName]: not all code paths return a value

In some cases, this error means that your method returns a string when it should be an int (this one can be caused by a lot of things outside of methods):

# error CS0029: Cannot implicitly convert type 'string' to 'int'

It's important to remember that running into errors is a natural part of coding. As a teacher once put it <u>"Great programmers understand that errors are part of the process, and they know how to find the solution to each while learning something new from them."</u>

### **☑**Instructions

1.

This code has a bunch of errors! Run the code to find them.

2.

Fix the first error by adding a return type to one of the methods.

Hint

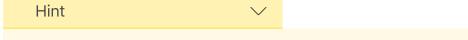
Fix the error by adding a return type to the DecoratePlanets() method.

**3.** Fix the second error by adding a return to one of the methods.



Fix the error by adding a return statement to the IsPlutoADwarf() method.

**4.** Fix the last error by changing the return type of one of the methods.



Fix the error by changing the return type of the CountThePlanets() method.