IRIS Group Code Test

This test enables you to demonstrate your level of expertise in coding, testing and troubleshooting. We are expecting you to deliver industry standard solution, taking in consideration SOLID principles and relevant design patterns.

In this test, we would like you to refactor the **GetStudent** method in the **StudentService** class. When refactoring you should consider ***SOLID principles, maintainability, and testing***.

You can use any framework(s) of your choice. We are not expecting the work to be finished, but we will expect you to discuss your approach and any further improvement you would make.

You change anything, but not the following:

* Signature of the ArchivedDataService
* Signature of the StudentDataAccess
* Signature of the FailoverStudentDataAccess

The **GetStudent** method is responsible for executing the following logic

* Based on the isStudentArchived parameter retrieve Students from the archive
* The main Student data store is a 3rd party service (which doesn’t have particularly high SLA), so therefore a Failover data store has been created which stores a backup copy of the Student records
* The method evaluates if the system should be in failover mode based on a given number of failed requests in a given time period (currently 10 minutes)
* If the system is in failover mode Students are retrieved from the failover store