This assignment is built on top of the previous assignment. You will now create unit tests for your 3 AI search library classes. Note it is expected that you will fix any code defects detected by the unit tests. If you find errors independent of a unit test, consider writing a test for it, in case the error resurfaces at a later time.

### Required Code

- Create unit test implementation files in `cs4300-code-ai-agents/prog/RubiksCube/tests`.
- At a minimum, there should be a test for every possible outcome of every method of every class.
- Consider using different unit test .cpp files for different purposes. For example, `test_search_action.cpp` might be useful for holding the unit tests of the `Action` class.

### Required Build System

- Configure the build system to recognize your tests in `cs4300-code-ai-agents/build/linux/prog/RubiksCube/Makefile.RubiksCubeUnitTests`.
- Include your non-test .cpp and .h files in the Makefile.

### Required Functionality

- Your code and tests must compile.
- The unit tests must all pass.

### Passoff

Submit your source code from `cs4300-code-ai-agents/prog/RubiksCube` to Canvas. This should include the contents of the `tests` subdirectory.