Required Classes

- Create header and implementation files in `cs4300-code-ai-agents/prog/RubiksCube`.
- Create an `Action` class that inherits from `ai::Search::Action`. This class is usually simple. Instances need to be able to uniquely identify any of the legal actions.
- Create a `State` class that inherits from `ai::Search::State`. This class will probably have an instance of your cube class as a data member. There are a few required methods, for example `isEqual`.
- Create a `Problem` class that inherits from `ai::Search::Problem`. This class requires at least 4 methods, in addition to the constructor. Look at the `Actions`, `GoalTest`, `Result` and `StepCost` methods.

Required Build System

- Configure the build system to recognize your files in `cs4300-code-ai-agents/build/linux/prog/RubiksCube/Makfile.RubiksCubeSolver`.

Required Functionality

- Your code must compile, and be as close to correct as possible.
- No executable program is required at this stage.

Passoff

Submit your source code from `cs4300-code-ai-agents/prog/RubiksCube` to Canvas.