

## Comp2526 A#2b

**Purpose:** Testing the flexibility of A2a code design with the addition of new features. Working with streaming.

**Description:** You are to add the following features to your Chess Program (A2a). MOVEMENTS MUST BE DONE POLYMORPHICALLY – marks lost failing to follow good OOP practice.

Proper chess movements according to the chess piece: [final square must be empty]

**pawn** – can move forward 1 or 2 on that piece's FIRST move, 1 forward afterwards.

**Castle/Rook** – can move horizontal or vertical unlimited number of spaces as long as the way is clear of other pieces

**Bishop** – can move on the diagonal unlimited number of spaces as long as the way is clear of other pieces

**Knight** – moves in an “L” pattern of 2-1 or 1-2 in any direction, the path does not need to be clear

**Queen** – can move in any direction unlimited number of spaces as long as the way is clear of other pieces

**King** – can move in any direction 1 space

**Turns** (players taking turns during game)

Open/Save feature to save and restore a game of chess. This feature is to be performed using Serialization. You will also need to add a menu and use the open/save dialog.

### Marking Guide

| Function                  | Mark |
|---------------------------|------|
| chess movements      6x10 | 60   |
| Turns                     | 10   |
| Open/Save                 | 30   |

**Assignment due February 15 at 11:59pm**