

# SMT Coding Assessment Solutions

## Task1- Tic-tac-toe

This folder contains 2 folders and 1 file.

- Output folder contains output screenshots from the program, ("X" win, "O" win and draw condition), along with unit test screenshot.
- UnitTests is a Google test project which has Unit test cases.
- TicTacToe.cpp is the main cpp file that has the game along with its documentation.

I ran the code as "g++ TicTacToe.cpp -o TicTacToe" and executed TicTacToe to get the output as shown in the screenshot.

Time Spent:

- Algorithm: 30min
- Coding and fixing errors: 1hr
- Unit testing: 1hr
- Total time spent: 2hrs 30min

## Task 2- Coding Problems

This folder contains 1 folder and 2 files.

- OutputScreenshots folder contains screenshots of sample input values and its output. I have used "cout" in the Boolean functions so as to see the computed values.
- coding-problems (2).h was the given skeletal header file and contains my implementation of the problems along with the documentation.
- Task2.cpp is sample cpp file wherein I imported coding-problems (2).h file to pass in the inputs and check for the outputs

I ran the code as "g++ task2.cpp -o task2" and executed task2 to get the output as shown in the screenshot.

Time Spent:

- Problem 1 – Formula derivation and coding: 20min
- Problem 2 – Formula derivation and coding: 20min
- Problem 3 – Formula derivation and coding: 45min
- Total time spent: 1hr 25min