Practical 1: Programming Warm-Up Through the Tic-Tac-Toe Game

Your Name  
Class Roll Number  
Department Name   
College Name  
Submission Date

*Summary*—Here you summarize the report in 100 words or less. State what you are supposed to do, what you did and what you found. This you will write at the end. This is for the reader to get a short summary of what they can expect to find in the report.

Keywords—TicTacToe, Java, Two-Player Game (include at most five keywords)

# Problem Description

In one paragraph (no more than 7 sentences) write what you are required to do in this practical.

# Background

## Tic-Tac-Toe

Briefly describe what this game is and how this game is played.

## TicTacToe Bot

Describe why this game is easy for a computer (bot) to win against a human opponent. Mention the common techniques people use to build such a bot. Write a couple of lines about the techniques. You do not need to describe how the techniques work in detail.

# Program Description

Here you give a brief description of what your program does i.e. what happens when we run the program. Then describe how the program works. Give a flowchart of the TTT Engine that explains how the game flows (starts, plays and ends). Make sure your flowchart fits in this column.

# Implementation

Here you describe the important classes and methods that you have added to the code provided to you. You are not supposed to write code here. You will describe the purpose of the class and/or functions/methods and their parameters. Only describe the important methods and limit this to three per class.

## TicTacToe Class

Briefly describe the purpose of this class.

### Method A: Describe the purpose of this method and the parameters it takes. Do not write code here.

### Method B: Describe the purpose of this method and the parameters it takes. Do not write code here.

### Method C: Describe the purpose of this method and the parameters it takes. Do not write code here.

## TTTGame Class

Briefly describe the purpose of this class.

### Method A: Describe the purpose of this method and the parameters it takes. Do not write code here.

### Method B: Describe the purpose of this method and the parameters it takes. Do not write code here.

Method C: *Describe the purpose of this method and the parameters it takes*. *Do not write code here.*

# Tests and Results

In this section, you will describe how you tested your program. Summarize the tests that you did and the results you got from them. If there are bugs in your implementation mention it here.

# Lessons Learnt

In the first paragraph describe what concepts/ideas/implementations you learnt from this practical. In the second paragraph describe the concepts and implementation you struggled with. Basically, say what was difficult for you in doing this practical. In the last paragraph describe how you can improve on your current program.

##### Program Listing

## TicTacToe.java

Include your code with proper formatting and generous comments. For the code, use the Consolas font (size 10).

## TTTGame.java

Include your code with proper formatting and generous comments. For the code, use the Consolas font (size 10).