1. What are the most challenging aspect of the coursework task?

ANS: The main challenges in this task may include:

i.Implementing the game logic to handle player moves, computer moves, checking for wins/draws, etc.

ii. Creating a user-friendly interface to display the game board and prompt the player for their moves.

iii. Implementing a leaderboard feature to store and display scores for each player.

iv. Handling errors and exceptions, such as invalid user input.

v. Ensuring the program is efficient and scalable, especially for larger board sizes or more advanced game variants.

2.How did you go about completing the task?

ANS: The code initializes the game by displaying the board and prompting the player to choose a cell. Then, it checks for a win or draw after each player's turn and prints the result accordingly. If the player chooses to save the score, their name and score are saved to a file named "leaderboard.txt". If the player chooses to display the leaderboard, the scores saved in the file are loaded and displayed in descending order of the score. Overall, it is complete game with basic functionality and leaderboard feature.

3. What have you learned over the course of completing this coursework task?

ANS: Python syntax: we have learned or reinforced some basic syntax and concepts in Python, such as loops, conditionals, functions, exceptions, lists, and dictionaries.

Game programming: we have learned or reinforced how to implement a simple game in Python, including creating the game board, getting input from the user, making decisions based on the input, and checking for winning or drawing conditions.

File handling: we have learned or reinforced how to read from and write to a file in Python, including opening and closing a file, reading lines from a file, and writing data to a file.

Debugging: we have learned or reinforced how to debug your code when things go wrong, including identifying errors, reading error messages, and fixing bugs in your code.

Code organization: we have learned or reinforced how to organize your code into functions and modules to make it more readable, reusable, and maintainable.

Overall, completing this coursework task might have helped me to improve my programming skills, gain experience with Python, and apply some of the concepts and techniques I have learned in this course.