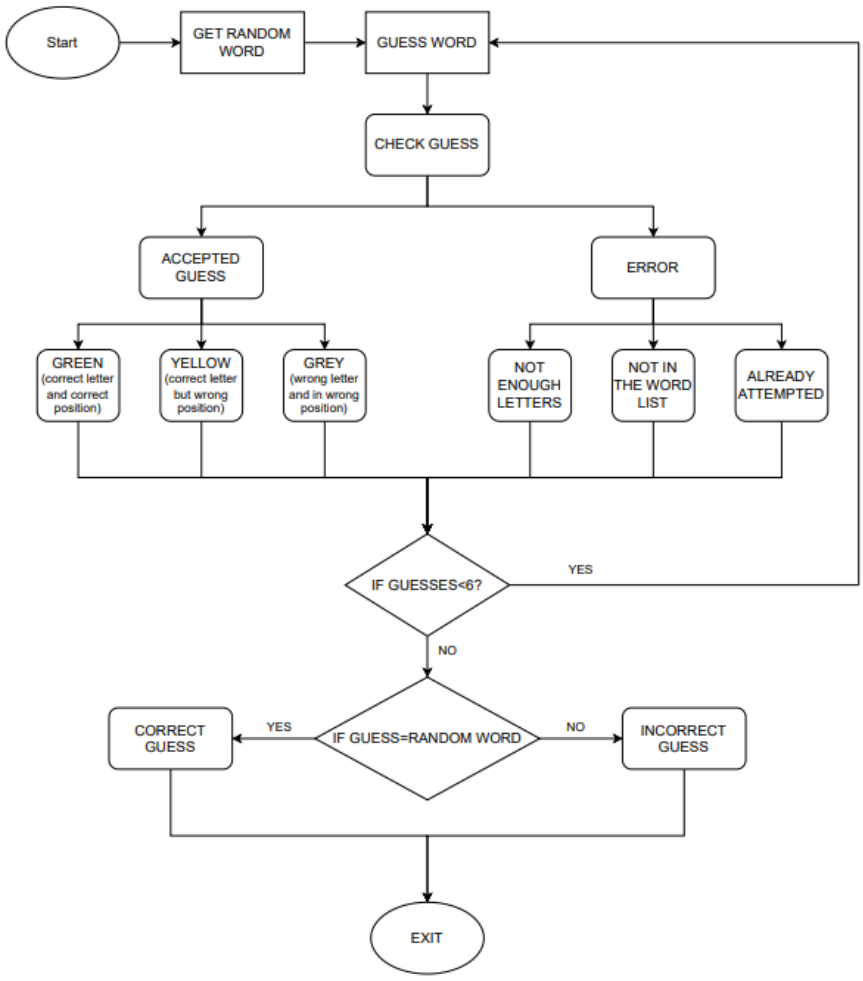
Experiment No : 14

Title : Wordle Game

Description : The game of wordle is a popular word guessing game. Guessing a five-letter word initiates the game. After each guess the game indicates whether each letter is in the word, in the correct position or incorrect position. This provides a clue as to the correct answer. Six attempts are provided to the player to guess the right word.

Program Flow :

- Terminology: The correct answer of the game is called 'secret word'. The term "secret word list" refers to a list of characters of the secret word.The player's guess is known as the "guessed word."The term "guessed word list" refers to a list of the characters of the guessed word. A list containing the state of each letter is called 'state list'.

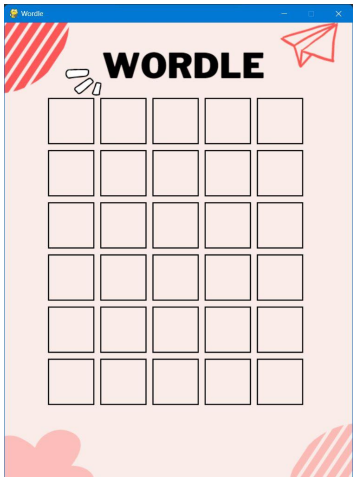


- The packages used in the program are:
    1. Random - This package was used to randomly choose a 5-letter word from the secret word list.
    2. Pygame - This package was used to write the game as it included various graphic libraries. It was used to design as well as run the game.
    3. Enum - It is an in built python package used for defining enumerations. It makes it convenient to define and handle all the different errors possible.

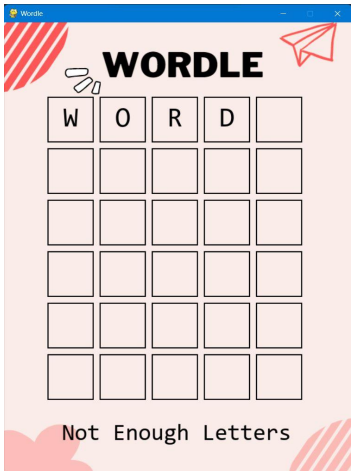
Program : https://github.com/Maverick8479/Wordle

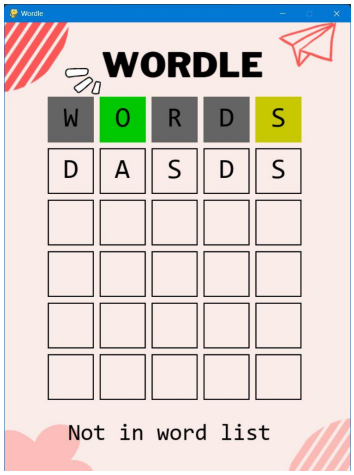
Output :

1) Wordle GUI:

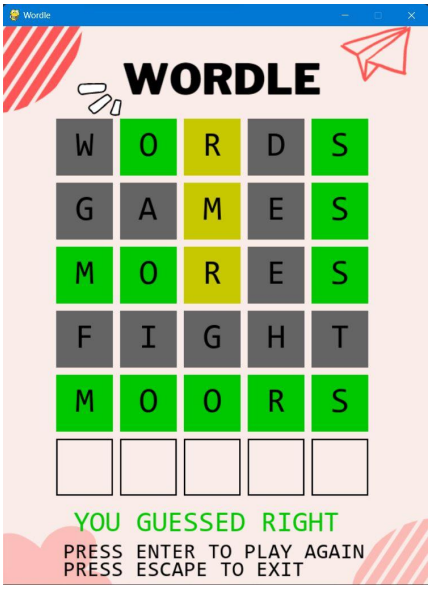


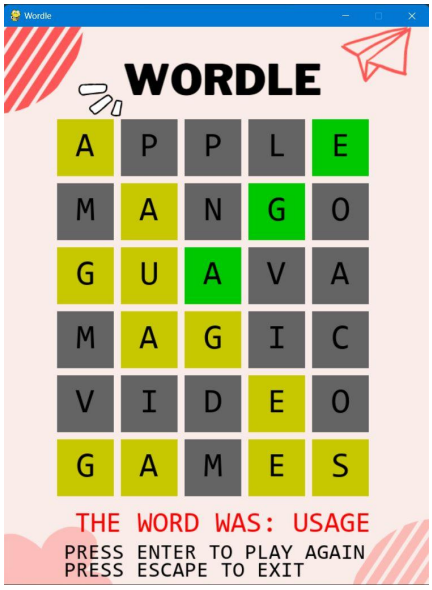
2) Errors while playing the game:





3) Game Conclusion:





Conclusion :

- The use of pygame made it easy to use images in contrast to a windowing library such as tkinter.
- It also made it very convenient to render fonts in the desired size and location.
- Pygame made it convenient for implementing animations giving a better user experience and added overall fluidity to the game.
- The project can be improved by making a leaderboard and a user management for the leaderboard.