**GROUP 8**

1. Overview

The Lotario Lottery Game Project provides a lottery experience where users can purchase lines of randomly generated numbers, add an encore line (an additional lottery game), and save ticket information or generate and save results. It provides a safe play environment that follows Lotario lottery rules.

2. Game Rules

- The game generates six numbers per line, each between 1 and 45, without repeating.

- A result line also has 6 numbers, and users can win prizes based on matching their numbers with the result line.

- Each line costs $3.00, while the Encore game costs $1.00 (with one bonus line per ticket).

- The program generates a ticket and results files to store data.

3. Program Logic

- Generate Numbers: The game generates six random, non-repeating numbers per line, between 1 and 45 using the `generateNumbers()` function.

- Encore Line: The program generates a separate Encore line of seven numbers from 0 to 9 (numbers can repeat).

- Cost Calculation: Calculates the total cost based on the number of lines and the selection of the Encore feature.

- File Storage:

- Ticket File: Saves purchase date & time, generated lines, Encore line (if chosen), and total cost using the `saveTicketToFile()` function.

- Result File: Saves the winning result draw, date, and time using the `saveFinalResults()` function.

4. Functions

- `generateNumbers()`: Generates a specified count of unique random numbers between 1 and a given maximum value.

- `generateFileName()`: Generates a unique filename based on the current date and time for saving ticket data.

- `saveTicketToFile()`: Saves all game ticket details, including lines played, the Encore line, and total cost to a uniquely named file.

- `saveFinalResults()`: Saves the draw results with a unique timestamp, appends new results to a results file, and tracks the drawn numbers and Encore line.

- `playLottery()`: Manages the entire process of playing the lottery, including generating ticket lines, bonus lines, and saving the results.

- `askEncore()`: Asks if the user would like to play the Encore feature.

- `askYesNo()`: Handles generalized yes/no prompts to interact with the user.

5. User Flow

- Game Rules Display: The program first displays the important rules of the game using the `displayRules()` function.

- Lines Count Input: The program asks the user to enter the number of lines to generate.

- Encore Choice: The user chooses whether to play Encore using the `askEncore()` function.

- Cost Calculation: The program calculates and displays the total cost based on the user's choices.

- Ticket File Generation: Generates a ticket file containing all relevant details using `saveTicketToFile()`.

6. Conclusion

The Lotario Lottery Game Project successfully provides:

- Generation of lottery lines and Encore line plays that follow actual game rules.

- Addition of unique filenames with timestamps to avoid file conflicts.

- A fun, organized lottery experience for users.