The Unix Workbench Final Project

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1 Tasks to be Implemented

Implement a program guessinggame.sh in Bash. This program will continuously ask the user to guess the number of files in the current directory, until they guess the correct number. The user will be informed if their guess is too high or too low. Once the user guesses the correct number of files in the current directory they should be congratulated.

2 Source Code

```bash
#!/usr/bin/env bash

function guessinggame {
        echo "Welcome to the guessing game"
        echo "How many files do you think are in the current directory?"
        let local actual_count=$(ls | wc -l)
        let local guess=$actual_count-1
        while [[ $guess -ne $actual_count ]]
        do
                echo "Please enter your guess, followed by [ENTER]"
                read your_guess
                let guess=$your_guess
                if [[ $guess -eq $actual_count ]]
                then
                        echo "Congratulations, you are correct!"
                elif [[ $guess -gt $actual_count ]]
                then
                        echo "Sorry, your guess is too high. Please guess again!"
                else
                        echo "Sorry, your guess is too low. Please guess again!"
                fi
        done
}
guessinggame
```

3   Review Criteria

- When the program starts the user should be asked how many files are in the current directory, and then the user should be prompted for a guess.

- If the user's answer is incorrect the user should be advised that their guess was either too low or too high and then they should be prompted to try to guess again.

- If the user's guess is correct then they should be congratulated and the program should end.

- The program should not end until the user has entered the correct number of files in the current directory.

- The program should be able to be run by entering bash guessinggame.sh into the console.

- The program should contain at least one function, one loop, and one if statement.

- The program should be more than 20 lines of code but less than 50 lines of code.

4   Makefile

A makefile should produce the README.md which should contain the following information:

- The title of the project.

- The date and time at which make was run.

- The number of lines of code contained in guessinggame.sh.

5   Makefile Implementation

```
all: README.md

README.md: guessinggame.sh
        echo "Guessing Game" > README.md
        date >> README.md
        wc -l guessinggame.sh | egrep -o "[0-9]+" >> README.md

clean:
        rm README.md
```