TODO 2: Shell Scripting

Create a shell script that implements a simple word guessing game with the following rules:

1. **Predefined word**: The script should have a predefined word for the user to guess which is: "gaza".

2. **Ask the user to guess a letter**: The script should repeatedly ask the user to guess a letter.

3. **Keep track of incorrect guesses**: The script should keep track of incorrect guesses and display them.

4. **Limit the number of incorrect guesses**: Allow the user a maximum of 5 incorrect guesses.

5. **Determine win/loss**: The game should end when the user either guesses the word correctly or reaches the maximum number of incorrect guesses.

6. **BONUS: Display the word with hidden letters**: The script should display the word with underscores for each letter (e.g., "_ _ _ _" for "gaza") and if the user guesses a correct letter, reveal all instances of that letter in the word.

Notes:
- The name of your shell script must be in the following convention:
  FirstName_FamilyName.sh
- Lab manual is allowed to open, but using the internet is not allowed.
- ToDo is individual and Cheat is not allowed (Lead to a 0 mark) <u>**We'll be very strict in that**</u>.

What to submit?
- You only need to submit the shell script file (.sh).

Run Examples:

```
tarek@tarek-VirtualBox:~/Desktop$ ./tarek_zidan.sh
Welcome to the Word Guessing Game


_ _ _ _

Incorrect guesses:
Guess a letter: a
Correct guess
_ a _ a

Incorrect guesses:
Guess a letter: g
Correct guess
g a _ a

Incorrect guesses:
Guess a letter: z
Correct guess
You won!
tarek@tarek-VirtualBox:~/Desktop$
```

```
tarek@tarek-VirtualBox:~/Desktop$ ./tarek_zidan.sh
Welcome to the Word Guessing Game

_ _ _ _

Incorrect guesses:
Guess a letter: a
Correct guess
_ a _ a

Incorrect guesses:
Guess a letter: b
Incorrect guess
_ a _ a

Incorrect guesses: b
Guess a letter: c
Incorrect guess
_ a _ a

Incorrect guesses: bc
Guess a letter: d
Incorrect guess
_ a _ a

Incorrect guesses: bcd
Guess a letter: e
Incorrect guess
_ a _ a

Incorrect guesses: bcde
Guess a letter: f
Incorrect guess
Sorry, you've reached the maximum number of incorrect guesses. The word was 'gaza'.
tarek@tarek-VirtualBox:~/Desktop$
```