

Please solve the following problem in your preferred coding language.

Duration: 30 mins

Problem Statement

You are tasked with implementing a word guessing game. The game randomly selects a word from a given list of words. The player's objective is to guess the letters in the word within a limited number of turns. For each turn, the player can guess a single character. If the guessed character is present in the word, it is revealed in the correct positions. If the guessed character is not in the word, the player loses a turn. The game continues until the player successfully guesses all the characters in the word or runs out of turns.

Write a function `guess_word(word)` that takes a word as input and simulates the word guessing game. The function should display the current state of the guessed word, prompt the player for a character guess, provide feedback on correct or incorrect guesses, and indicate if the player wins or loses the game.

Function Signature

Python

```
def guess_word(word: str) -> bool
```

Input

word: A string representing the word to be guessed. It will be randomly selected from a given list of words

Output

Return a boolean value indicating whether the player wins (True) or loses (False) the game.

Example

Python

```
Guess a character: a
_ _ a _ _
Guess a character: t
```

Wrong

You have 11 more guesses

_ _ a _ _

Guess a character: m

Wrong

You have 10 more guesses

_ _ a _ _

Guess a character: s

Wrong

You have 9 more guesses

_ _ a _ _

Guess a character: p

Wrong

You have 8 more guesses

_ _ a _ _

Guess a character: w

Wrong

You have 7 more guesses

_ _ a _ _

Guess a character: b

b _ a _ _

Guess a character: o

b o a _ _

Guess a character: r

b o a r _

Guess a character: d

b o a r d

You Win