HANGMAN

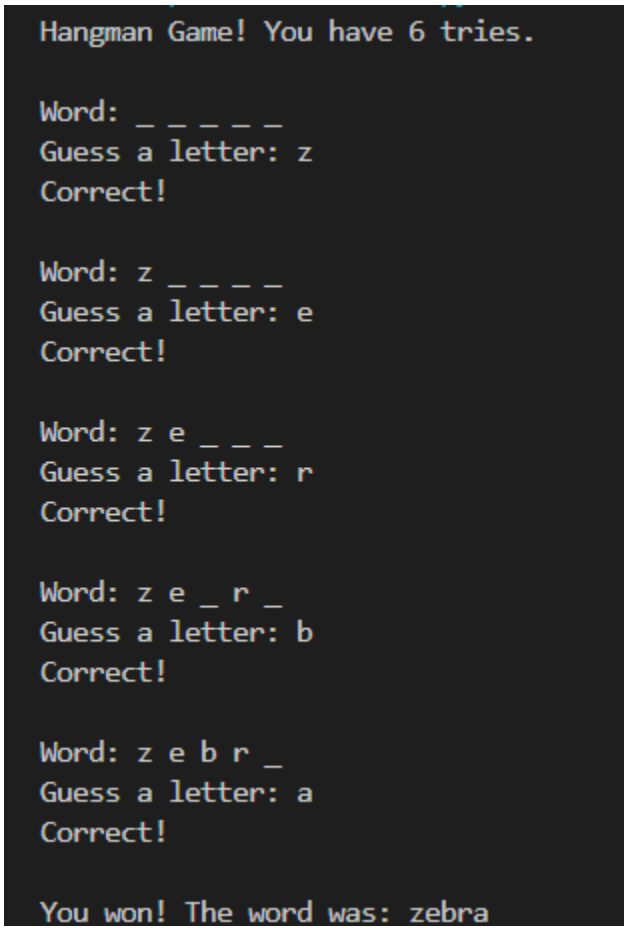
PROGRAM:

```
import random
words = ["apple", "tiger", "clock", "house", "zebra"]
word = random.choice(words)
display = ["_"] * len(word)
tries = 6
guessed = []
print("Hangman Game! You have 6 tries.")
while tries > 0 and "_" in display:
    print("\nWord:", " ".join(display))
    letter = input("Guess a letter: ").lower()
    if letter in guessed:
        print("Already guessed.")
        continue
    guessed.append(letter)
    if letter in word:
        for i in range(len(word)):
            if word[i] == letter:
                display[i] = letter
        print("Correct!")
    else:
        tries -= 1
        print("Wrong! Tries left:", tries)
if "_" not in display:
    print("\nYou won! The word was:", word)
else:
    print("\nYou lost! The word was:",word)
```

EXPLANATION:

1. word = random.choice(words): Selects a random word from the list.
2. display = ["_"] * len(word): Creates a list of underscores to represent the word.
3. The game loop checks if the player has won or lost.
4. letter = input("Guess a letter: ").lower(): Gets the player's guess.
5. The code updates the display and tries remaining based on the player's guess.

OUTPUT :


Hangman Game! You have 6 tries.
Word: _ _ _ _ _
Guess a letter: z
Correct!
Word: z _ _ _ _
Guess a letter: e
Correct!
Word: z e _ _ _
Guess a letter: r
Correct!
Word: z e _ r _
Guess a letter: b
Correct!
Word: z e b r _
Guess a letter: a
Correct!
You won! The word was: zebra

CHATBOT

PROGRAM :

```
def chatbot():
    print("Chatbot: Hello! I'm your friendly chatbot. Type 'bye' to
exit.")
    while True:
        user_input = input("You: ").lower()
        if user_input == "hello":
            print("Chatbot: Hi!")
        elif user_input == "how are you":
            print("Chatbot: I'm fine, thanks!")
        elif user_input == "bye":
            print("Chatbot: Goodbye!")
            break
        else:
            print("Chatbot: I didn't understand that.")
chatbot()
```

EXPLANATION :

1. The chatbot prints a greeting message and enters a loop where it waits for user input.
2. The user types a message, which is converted to lowercase.
3. The chatbot checks the user's input against predefined responses:
   -"hello": respond with "Hi!"
   - "how are you": responds with "I'm fine, thanks!"
   - "bye": responds with "Goodbye!" and exits the loop
   - Any other input: respond with "I didn't understand that."
4. The loop continues until the user types "bye".

OUTPU :

```
Chatbot: Hello! I'm your friendly chatbot. Type 'bye' to exit.
You: hello
Chatbot: Hi!
You: how are you
Chatbot: I'm fine, thanks!
You: what's up
Chatbot: I didn't understand that.
You: bye
Chatbot: Goodbye!
```