AI Lab\Hangman Game\hangman.py

```python
import random

words = ['python', 'hangman', 'programming', 'computer', 'algorithm', 'database']
word = random.choice(words)
guessed = set()
attempts = 6

while attempts > 0:
    display = ''.join([letter if letter in guessed else '_' for letter in word])
    print(f"\nWord: {display}")
    print(f"Attempts left: {attempts}")
    print(f"Guessed: {', '.join(sorted(guessed))}")

    if display == word:
        print("\nYou won!")
        break

    guess = input("Guess a letter: ").lower()

    if len(guess) != 1 or not guess.isalpha():
        print("Please enter a single letter")
        continue

    if guess in guessed:
        print("Already guessed")
        continue

    guessed.add(guess)

    if guess not in word:
        attempts -= 1
        print("Wrong!")
else:
    print(f"\nGame over! The word was: {word}")
```

```
>_pwsh  Python_LocalVC  master ≡ ?5 ~2  67ms
>> python -u "d:\SelfRepoClone\Python_LocalVC\AI Lab\Hangman Game\hangman.py"

Word: ________
Attempts left: 6
Guessed:
Guess a letter: m
Wrong!

Word: ________
Attempts left: 5
Guessed: m
Guess a letter: e

Word: _______e
Attempts left: 5
Guessed: e, m
Guess a letter: d

Word: d______e
Attempts left: 5
Guessed: d, e, m
Guess a letter: a

Word: da_a_a_e
Attempts left: 5
Guessed: a, d, e, m
Guess a letter: t

Word: data_a_e
Attempts left: 5
Guessed: a, d, e, m, t
Guess a letter: b

Word: databa_e
Attempts left: 5
Guessed: a, b, d, e, m, t
Guess a letter: s

Word: database
Attempts left: 5
Guessed: a, b, d, e, m, s, t

You won!
```