

HANGMAN GAME PROGRAM USING PYTHON

CODE:

```
import random
```

```
def choose_word():
```

```
    words = ["python", "hangman", "developer", "programming", "challenge"]
```

```
    return random.choice(words)
```

```
def display_word(word, guessed_letters):
```

```
    return " ".join([letter if letter in guessed_letters else "_" for letter in word])
```

```
def hangman():
```

```
    word = choose_word()
```

```
    guessed_letters = set()
```

```
    attempts = 6
```

```
    print("Welcome to Hangman!")
```

```
    while attempts > 0:
```

```
        print("\n" + display_word(word, guessed_letters))
```

```
        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_letters:
```

```
            print("You already guessed that letter.")
```

```
            continue
```

```
guessed_letters.add(guess)
```

```
if guess not in word:
```

```
    attempts -= 1
```

```
    print(f"Incorrect! You have {attempts} attempts left.")
```

```
if all(letter in guessed_letters for letter in word):
```

```
    print("\nCongratulations! You guessed the word: " + word)
```

```
    return
```

```
print("\nGame over! The word was: " + word)
```

```
if __name__ == "__main__":
```

```
    hangman()
```

OUTPUT:

Welcome to Hangman!

Guess a letter: python

Please enter a single letter.

Guess a letter: p

Incorrect! You have 5 attempts left.

Guess a letter: h

_ h _ _ _ _ _

Guess a letter: w

Incorrect! You have 4 attempts left.

_ h _ _ _ _ _

Guess a letter: h

You already guessed that letter.

_ h _ _ _ _ _

Guess a letter: d

Incorrect! You have 3 attempts left.

_ h _ _ _ _ _

Guess a letter: c

c h _ _ _ _ _

Guess a letter: a

c h a _ _ _ _

Guess a letter: l

c h a l l _ _ _ _

Guess a letter: e

c h a l l e _ _ e

Guess a letter: n

c h a l l e n _ e

Guess a letter: g

Congratulations! You guessed the word: challenge