Hangman Game

Description: Hangman Game Design a text-based Hangman game. The program selects a random word, and the player guesses one letter at a time to uncover the word. You can set a limit on the number of incorrect guesses allowed.

Source Code:

```
import random

def choose_word():


words=["hangman","computer","python","programming","language","game","co
de"]

    return random.choice(words)

def display_word(word,guessed_letters):

    display=''

    for letter in word:

        if letter in guessed_letters:

            display+=letter

        else:

            display+='_'

    return display

def hangman():

    max_attempts=6

    guessed_letters=[]

    word=choose_word()

    attempts=0

    print("Welcome to Hangman!")

    print("Try to guess the word.You have", max_attempts, "attempts.")

    print(display_word(word,guessed_letters))

    while attempts<max_attempts:

        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.append(guess)
        if guess not in word:
            attempts+=1
            print("Incorrect guess.You have", max_attempts-attempts, "attempts left.")
        else:
            print("Good guess!")
        word_display=display_word(word,guessed_letters)
        print(word_display)
        if '_' not in word_display:
            print("Congratulations!You guessed the word:",word)
            break
    if '_' in word_display:
        print("Sorry,you ran out of attempts.The word was:",word)
hangman()
```

Output:

```
Welcome to Hangman!
Try to guess the word.You have 6 attempts.
_________
Guess a letter: p
Incorrect guess.You have 5 attempts left.
_________
Guess a letter: l
Good guess!
l________
```

Guess a letter: a

Good guess!

la___a__

Guess a letter: n

Good guess!

lan__a__

Guess a letter: g

Good guess!

lang_ag_

Guess a letter: u

Good guess!

languag_

Guess a letter: d

Incorrect guess.You have 4 attempts left.

languag_

Guess a letter: e

Good guess!

language

Congratulations!You guessed the word: language