Question 1:

Hangman:

```
import random import random as rand from typing import List


Initialize the hangman states


hangman_state = [ r"""
------
| |
| O
| /|\
| / \
|
""", r"""
-----------------
| |
| O
| /| \
| | /
|
```

Lab Task:


```
""", r"""
------------------
| |
| O
| /| \
|
|
""", r"""
------
| |
| O
| |
|
|
""", r"""
------
| |
| O
|
|
```

Lab Task:


```
|
""", r"""
------
| |
|
|
|
|
""", r"""
------
|
|
|
|
|
""", ]
```

word_list: List[str] = ["python", "hangman", "challenge", "programming","developer"]

Def get_random_word(): return random.choice(word_list).upper()

def display_hangman(stage): print(hangman_state[stage])

def main(): word = get_random_word() palabra = " _ " * len(word) letters: List[int] = [] attempts = 6 print("Welcome to hangman!")

while attempts != 0:

    if attempts is 6: # display hangman at the beginning

        display_hangman(attempts)

    else:

        display_hangman(attempts)

    print("Current word: ", " ".join(palabra))

    print(f"Guessed letters: {letters}")

    buf = input("Please make your guess here: 1 character or full word").upper()

```
    if len(buf) == 1 and buf.isalpha():
        if buf in letters:
            print("You have already guessed that letter.")
        else:
            if buf in word:
            print("Good Work! '", buf, "' is a part of the word.")
            letters.append(buf)
            palabra = ""
            for letter in word:
                if letter in letters:
                    palabra+=letter
                else:
                    palabra+='_'

            if "_" in palabra:
                print(f"Congratulations!!! You have guessed the
correct word: {word}")
```