**NAME**

**JAHNZAIB ZAFAR**

**SECTION**

**BS ARTFICIAL INTELLIGENCE– 3B**

**TASK (1)**

**PART NUMBER 4**

**TOPIC**

**HANGMAN GAME**

**OUTPUT**

**Welcome To Hangman Game**

**\_\_\_\_\_\_\_\_\_\_**

**enter your letter=k**

**your letter is not correct**

**your remaining chances 6**

**......|......**

**enter your letter=e**

**\_E\_\_\_\_\_\_\_\_**

**enter your letter=k**

**your letter is not correct**

**your remaining chances 5**

**.....|.....**

**.....O.....**

**enter your letter=t**

**TE\_\_\_\_\_\_\_\_**

**enter your letter=g**

**TE\_\_\_\_\_\_G\_**

**enter your letter=l**

**TE\_\_\_\_L\_G\_**

**enter your letter=v**

**your letter is not correct**

**your remaining chances 4**

**......|.......**

**......O.......**

**......|.......**

**enter your letter=d**

**your letter is not correct**

**your remaining chances 3**

**......|.......**

**......O.......**

**...../|.......**

**enter your letter=b**

**your letter is not correct**

**your remaining chances 2**

**......|.......**

**......O.......**

**...../|\......**

**enter your letter=w**

**your letter is not correct**

**your remaining chances 1**

**......|.......**

**......O.......**

**...../|\......**

**...../.........**

**enter your letter=m**

**your letter is not correct**

**your remaining chances 0**

**......|.......**

**......O.......**

**...../|\......**

**...../.\......**

**you lose**

**try again**

**EXPLANATION**

**This is a Hangman Game.**

* I imported the **random** module so that a random word will be chosen from the file.
* I created a **text file (**words.txt**)** in which I wrote different words. The program reads that file and randomly picks one word from it.
* The chosen word is then converted into **uppercase** to avoid case sensitivity issues.
* I set the total chances to **7**. If all chances end, the game will stop, and the player will lose.
* I displayed underscores (\_) according to the length of the word, so that the user knows how many letters are in the word.
* I used a **while loop** which continues until the chances become zero.
* Inside the while loop, I used a **for loop with index checking**. It checks each index of the word. If the entered letter matches, then it replaces the underscore with that correct letter.
* I used **string slicing** to place the guessed letter in the correct position, while keeping other letters hidden.
* If the guessed word becomes equal to the original word, it prints **“Congrats! You win”** and shows the correct word.
* If the guessed letter is not in the word, the program decreases the chances by 1.
* After each wrong guess, the program also shows a **Hangman drawing (step by step)**. This makes the game more interesting and shows how close the player is to losing.
* If all chances become zero, the program prints **“You lose, try again”** and the Hangman figure is completed.