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Section: IT- 3 A

Department: BS-IT

Course: Artificial Intelligence

Lab Task: Lab #06

- **Task 01:-** Write a Python function that takes a number as input and returns the sum of its digits.

```
def sum_of_digits(number):  
    return sum(int(digit) for digit in str(number))  
  
number = int(input("Enter a number: "))  
print("Sum of digits:", sum_of_digits(number))
```



The screenshot shows a Python IDE interface with a terminal window. The terminal displays the following commands and output:

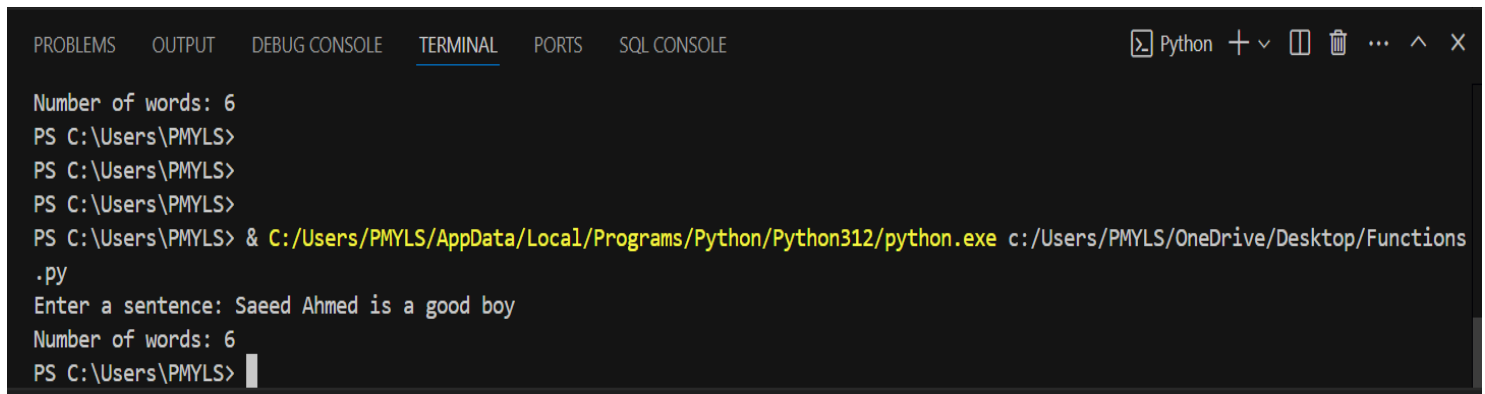
```
PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions  
.py  
Saeed  
PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions  
.py  
Enter a number: 34  
Sum of digits: 7  
PS C:\Users\PMYLS> 
```

The status bar at the bottom indicates: Ln 1, Col 1 (170 selected) Spaces: 4 UTF-8 CRLF {} Python 3.12.2.

- **Task 02:-** Write a Python function that takes a sentence as input and returns the number of words in it.

```
def count_words(sentence):  
    return len(sentence.split())
```

```
sentence = input("Enter a sentence: ")  
print("Number of words:", count_words(sentence))
```

A screenshot of a Windows command prompt window. The title bar shows 'Python' and standard window controls. The terminal output shows the execution of a Python script. It starts with 'Number of words: 6', followed by several 'PS C:\Users\PMYLS>' prompts. The user runs a command to execute a Python script: 'PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions .py'. The script prompts 'Enter a sentence: Saeed Ahmed is a good boy' and then outputs 'Number of words: 6'. The prompt 'PS C:\Users\PMYLS>' is shown again at the end.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE  
Python + v [icon] [icon] ... ^ X  
Number of words: 6  
PS C:\Users\PMYLS>  
PS C:\Users\PMYLS>  
PS C:\Users\PMYLS>  
PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions  
.py  
Enter a sentence: Saeed Ahmed is a good boy  
Number of words: 6  
PS C:\Users\PMYLS> |
```

- **Task 03:-** Write a Python function that takes an integer and returns whether the number is even or odd.

```
def check_even_odd(number):  
    return "Even" if number % 2 == 0 else "Odd"  
  
number = int(input("Enter a number: "))  
print("The number is:", check_even_odd(number))
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS SQL CONSOLE

Python + ▾ □ □ ... ^ X

```
PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions
.py
Enter a number: 13
The number is: Odd
PS C:\Users\PMYLS> & C:/Users/PMYLS/AppData/Local/Programs/Python/Python312/python.exe c:/Users/PMYLS/OneDrive/Desktop/Functions
.PY
Enter a number: 22
The number is: Even
PS C:\Users\PMYLS> 
```

Ln 7, Col 1 (172 selected) Spaces: 4 UTF-8 CRLF {} Python 3.12.2