AI ML

ASSIGNMENT-1

TASK-1:-

• Create two list and join those two list

→ Here are *two ways* to create two lists and join them in python :

1. * using the +operator * : you can use the + operator to concentenate two lists together, creating a new list that contains all the elements from both lists

Here's an Escample :

Python
```
list 1 = [1, 2, 3]
list 2 = [4, 5, 6]
combined _list = list 1 + list 2
Print (combined - list)
```

The will output : ' [1, 2, 3, 4, 5, 6] ' 23.

2. * using list unpacking * : Another way to combine two lists is by unpacking all items from the lists you want to combine. By using the * operator, you can access all the items in both lists and unpack them into a third list. Here's an Escample :

Python
```
list 1 = [1, 2, 3]
list 2 = [4, 5, 6]
combined _list = [* list 1, * list 2]
Print ( combined _list )
```

The will output : ' [1, 2, 3, 4, 5, 6] '.

Task-2:-

• with if statement find the Euen numbers.

→ with certainly! you can use an * if statement* to check if a number is odd or Euen in python. Here's an Example code snippet that demonstrates this:

Python

```
num = int (input ("enter a number : "))
if (num % 2 ) == 0
        print ("{0} is an Euen number.". format
                                        (num))

else :
        print ("{0} is an odd number.". format (num))
```

in this code, we take an input number from the user using the 'input ()' function and convert it to an integer using the 'int()' function. we then use the modulo operator '%' to check if the number is divisible by 2. if the remainder is 0, the number is Euen; otherwise, it is odd.

Task -3:

Create a dictionary with 3 keys and 2 values for each key.

→ certainly! Here's an Example code snippet that creates a dictionary with 3keys and 2 values for each key:

Python
```
my-dict = {'key1': ['value1', 'value2']
           'key2': ['value3', 'value4']
           'key3': ['value5', 'value6']}
print (my-dict)
```

in this code, we create a dictionary called 'my-dict' with 3 keys ('key1', 'key2', and 'key3') and 2 values for each key. The values are stored as lists, which are enclosed in square brackets and separated by commas. we then print the dictionary using the 'print()' function.

Task-4:-

- Create a function with if statement which is used to find the odd number in python.

→ Example of a python function that uses an 'if' statement to determine whether 'a number is odd or Even :

Python

```
def check_odd_or_Even (num):
    if num % 2 == 0:
        Print (f" {num} is Even")
    else:
        Print (f" {num} is odd")
# Example usage
check_odd_or_Even (43)  #
output : 43 is odd
check_odd_or_Even (18)  #
output : 18 is even.
```

in this Example, the function 'check-odd-or-Even' takes an input number 'num' and checks if it is divisible by 2 using the modulo operator '%'. if the remainder is 0, the number is Even: otherwise, it is odd. The function then prints the result accordingly.

Task-5:-
- write a python function to sum all the numbers in a list

Sample list: (8,2,3,0,7)

Expected output: 20

→

Python

```
def sum_list (lst):
    return sum(lst)
```

\# Example usage

```
sample_list = [8, 2, 3, 0, 7]
Print (sum_list (sample_list))
# output: 20
```

in this Example, the function `sum_list` takes a list `lst` as input and returns the sum of all the numbers in the list using the built-in `sum()` function. The function then prints the result.

Alternatively, you can use a loop to iterate over the list and add up the numbers one by one. Here's an Example:

Python

```
def sum_list (lst):
    total = 0
    for num in lst:
        total += num
    return total
```

```
# Example usage
sample_list = [8, 2, 3, 0, 7]
Print (sum_list (sample_list))
# output : 20
```