assignment4

November 5, 2023

Creating two lists and joining them

```python
[3]: # Task 1
list1 = [1, 3, 5, 7, 9]
list2 = [2, 4, 6, 8, 10]
joined_list = list1 + list2
print("Joined List:", joined_list)
```

```
Joined List: [1, 3, 5, 7, 9, 2, 4, 6, 8, 10]
```

Finding the even numbers in a list using if statements

```python
[4]: # Task 2
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
even_numbers = [num for num in numbers if num % 2 == 0]
print("Even Numbers:", even_numbers)
```

```
Even Numbers: [2, 4, 6, 8, 10]
```

Creating a dictionary with 3 keys and 2 values for each key

```python
[5]: # Task 3
my_dict = {'key1': [1, 2], 'key2': [3, 4], 'key3': [5, 6]}
print("Dictionary:", my_dict)
```

```
Dictionary: {'key1': [1, 2], 'key2': [3, 4], 'key3': [5, 6]}
```

Creating a function to find odd numbers using an if statement

```python
[6]: # Task 4
def find_odd_numbers(nums):
    odd_numbers = [num for num in nums if num % 2 != 0]
    return odd_numbers

numbers_to_check = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
result = find_odd_numbers(numbers_to_check)
print("Odd Numbers:", result)
```

```
Odd Numbers: [1, 3, 5, 7, 9]
```

Writing a function to sum all the numbers in a list

```
[7]:  # Task 5
      def sum_list(numbers):
          return sum(numbers)

      sample_list = [8, 2, 3, 0, 7]
      output = sum_list(sample_list)
      print("Expected Output:", output)
```

Expected Output: 20