



```
In [1]: #create and join two lists
# Create two lists
list1 = [1, 2, 3]
list2 = ['a', 'b', 'c']

# Join the two lists
joined_list = list1 + list2

# Print the result
print("List 1:", list1)
print("List 2:", list2)
print("Joined List:", joined_list)
```

```
List 1: [1, 2, 3]
List 2: ['a', 'b', 'c']
Joined List: [1, 2, 3, 'a', 'b', 'c']
```

```
In [2]: #if statement to find even numbers
# Create a list of numbers
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]

# Use list comprehension to find even numbers
even_numbers = [num for num in numbers if num % 2 == 0]

# Print the original list and the even numbers
print("Original List:", numbers)
print("Even Numbers:", even_numbers)
```

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

In [3]: *# Create a dictionary with three keys and two values each*

```
my_dict = {  
    'key1': [1, 2],  
    'key2': ['a', 'b'],  
    'key3': [True, False]  
}
```

Print the dictionary

```
print("Dictionary:", my_dict)
```

Dictionary: {'key1': [1, 2], 'key2': ['a', 'b'], 'key3': [True, False]}

```
In [4]: #if statement to find odd numbers
def find_odd_numbers(input_list):
    # Initialize an empty list to store odd numbers
    odd_numbers = []

    # Iterate through the input list
    for num in input_list:
        # Check if the number is odd
        if num % 2 != 0:
            # If it's odd, add it to the odd_numbers list
            odd_numbers.append(num)

    # Return the list of odd numbers
    return odd_numbers

# Example usage:
numbers = [1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
result = find_odd_numbers(numbers)

# Print the original list and the odd numbers
print("Original List:", numbers)
print("Odd Numbers:", result)
```

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

```
In [5]: #to sum all the numbers in a list
def sum_of_numbers(input_list):
    # Use the built-in sum function to add up all numbers in the list
    result = sum(input_list)

    return result

# Example usage:
sample_list = [8, 2, 3, 0, 7]
total_sum = sum_of_numbers(sample_list)

# Print the sample list and the sum of its numbers
print("Sample List:", sample_list)
print("Sum of Numbers:", total_sum)
```

```
Sample List: [8, 2, 3, 0, 7]
Sum of Numbers: 20
```