In [1]:
```python
##1. Sum all the items in a list
def sum_list(lst):
    total = 0
    for item in lst:
        total += item
    return total

print("Sum:", sum_list([1, 2, 3, 4, 5]))
```

```
Sum: 15
```

In [2]:
```python
##2. Get the largest and smallest number from a list without using built-in functions
def min_max(lst):
    smallest = lst[0]
    largest = lst[0]
    for num in lst[1:]:
        if num < smallest:
            smallest = num
        if num > largest:
            largest = num
    return smallest, largest

nums = [3, 6, 1, 8, 2, 9]
minimum, maximum = min_max(nums)
print("Smallest:", minimum)
print("Largest:", maximum)
```

```
Smallest: 1
Largest: 9
```

In [3]:
```python
##3. Find and display duplicate values from a list
def find_duplicates(lst):
    seen = set()
    duplicates = set()
    for item in lst:
        if item in seen:
            duplicates.add(item)
        else:
            seen.add(item)
    return list(duplicates)

print("Duplicates:", find_duplicates([1, 1, 2, 3, 4, 4, 5, 1]))
```

```
Duplicates: [1, 4]
```

In [4]:
```python
##4. Split a given list into two parts at a given length
def split_list(lst, split_index):
    first_part = []
    second_part = []
    for i in range(len(lst)):
        if i < split_index:
            first_part.append(lst[i])
        else:
            second_part.append(lst[i])
    return first_part, second_part

original = [1, 1, 2, 3, 4, 4, 5, 1]
first_len = 3
part1, part2 = split_list(original, first_len)
print("Splitted list:", (part1, part2))
```

```
Splitted list: ([1, 1, 2], [3, 4, 4, 5, 1])
```

In [5]:
```python
##5. Traverse a list in reverse and print elements with original index
def reverse_traverse(lst):
    for i in range(len(lst)-1, -1, -1):
        print(f"Index {i}: {lst[i]}")

# Example
colors = ['red', 'green', 'white', 'black']
print("Reversed traversal:")
reverse_traverse(colors)
```

```
Reversed traversal:
Index 3: black
Index 2: white
Index 1: green
Index 0: red
```

In [ ]: