In [3]:
```
'''1. Sorting Sales Data:
Task: Given daily sales data [1200, 4500, 2300, 800, 3200], sort them in descending order.'''
sales = [1200, 4500, 2300, 800, 3200]
sorted_sales = sorted(sales, reverse=True)
print("Sales data sorted in descending order:", sorted_sales)
```

```
Sales data sorted in descending order: [4500, 3200, 2300, 1200, 800]
```

In [5]:
```
'''2. Splitting Student Marks:
Task: Split the student marks [78, 65, 89, 90, 56, 80] into 3 equal groups.'''
marks = [78, 65, 89, 90, 56, 80]
group_size = len(marks) // 3
groups = [marks[i:i + group_size] for i in range(0, len(marks), group_size)]
for idx, group in enumerate(groups, 1):
    print(f"Group {idx}: {group}")
```

```
Group 1: [78, 65]
Group 2: [89, 90]
Group 3: [56, 80]
```

In [7]:
```
'''3. Finding Best Performing Store:
Task: Find the index of the store with the highest sales from [25000, 32000, 40000, 28000].'''
sales = [25000, 32000, 40000, 28000]
best_store_index = sales.index(max(sales))
print("Index of the store with the highest sales:", best_store_index)
```

```
Index of the store with the highest sales: 2
```

In [9]:
```
'''4. Finding Worst Performing Store:
Task: Find the index of the store with the lowest sales from [25000, 32000, 40000, 28000].'''
sales = [25000, 32000, 40000, 28000]
worst_store_index = sales.index(min(sales))
print("Index of the store with the lowest sales:", worst_store_index)
```

```
Index of the store with the lowest sales: 0
```

In [11]:
```
'''5. Finding Insertion Index in Sorted Data:
Task: Given a sorted price list [10, 20, 30, 50], find the position to insert a new price 25.'''
import numpy as np
prices = np.array([10, 20, 30, 50])
new_price = 25
```

```
insertion_index = np.searchsorted(prices, new_price)
print("Position to insert the new price:", insertion_index)
```

```
Position to insert the new price: 2
```

In [13]:
```
'''6. Filtering High Temperatures:
Task: Identify days with temperatures above 35°C from [30, 36, 40, 28, 37].'''
temperatures = [30, 36, 40, 28, 37]
high_temperatures = [temp for temp in temperatures if temp > 35]
print("Temperatures above 35°C:", high_temperatures)
```

```
Temperatures above 35°C: [36, 40, 37]
```

In [15]:
```
'''7. Extracting High Salary Employees:
Task: Extract salaries above ₹50,000 from [40000, 55000, 62000, 48000].'''
salaries = [40000, 55000, 62000, 48000]
high_salaries = [salary for salary in salaries if salary > 50000]
print("Salaries above ₹50,000:", high_salaries)
```

```
Salaries above ₹50,000: [55000, 62000]
```

In [17]:
```
'''8.Generate a 5×5 NumPy array with values from 1 to 25.'''
import numpy as np
array_5x5 = np.arange(1, 26).reshape(5, 5)
print(array_5x5)
```

```
[[ 1  2  3  4  5]
 [ 6  7  8  9 10]
 [11 12 13 14 15]
 [16 17 18 19 20]
 [21 22 23 24 25]]
```

In [ ]:
```

```