In [2]:
```
import pandas as pd
import numpy as np
data = pd.read_csv('measurements.csv')
print("Data:")
print(data)
```

```
Data:
  Month  Measurement1  Measurement2  Measurement3
0   Jan            10            20            30
1   Feb            15            25            35
2   Mar            20            30            40
3   Apr            25            35            45
4   May            30            40            50
5   Jun            35            45            55
```

In [3]:
```
data_array = data[['Measurement1', 'Measurement2', 'Measurement3']].to_numpy()
print("\nData Array:")
print(data_array)
```

```
Data Array:
[[10 20 30]
 [15 25 35]
 [20 30 40]
 [25 35 45]
 [30 40 50]
 [35 45 55]]
```

In [8]:
```
mean_values = np.mean(data_array, axis=0)
std_dev_values = np.std(data_array, axis=0)
max_values = np.max(data_array, axis=0)
min_values = np.min(data_array, axis=0)
print("\nMean Values:")
print(mean_values)
print("\nStandard Deviation Values:")
print(std_dev_values)
print("\nMaximum Values:")
print(max_values)
print("\nMinimum Values:")
print(min_values)
```

```
Mean Values:
[22.5 32.5 42.5]

Standard Deviation Values:
[8.53912564 8.53912564 8.53912564]

Maximum Values:
[35 45 55]

Minimum Values:
[10 20 30]
```

In [9]:
```
constant = 10
modified_data = data_array + constant
sum_across_months = np.sum(data_array, axis=0)

print("\nModified Data (after adding constant):")
print(modified_data)
print("\nSum Across Months:")
print(sum_across_months)
```

```
Modified Data (after adding constant):
[[20 30 40]
 [25 35 45]
 [30 40 50]
 [35 45 55]
 [40 50 60]
 [45 55 65]]

Sum Across Months:
[135 195 255]
```

In [10]:
```
total_elements = data_array.size
reshaped_data = np.reshape(data_array, (6, 3))

print("\nReshaped Data:")
print(reshaped_data)
```

```
Reshaped Data:
[[10 20 30]
 [15 25 35]
 [20 30 40]
 [25 35 45]
 [30 40 50]
 [35 45 55]]
```