```
import numpy as np
import pandas as pd
marks=np.array([[85,90,98],[88,75,52],[99,95,85],[100,98,97],[56,65,75]])
print(marks)
```

```
[[ 85  90  98]
 [ 88  75  52]
 [ 99  95  85]
 [100  98  97]
 [ 56  65  75]]
```

```
average_marks = np.mean(marks)
min_marks = np.min(marks)
max_marks = np.max(marks)

print("\nAverage Marks (Overall):", average_marks)
print("Minimum Marks:", min_marks)
print("Maximum Marks:", max_marks)
```

```
Average Marks (Overall): 83.86666666666666
Minimum Marks: 52
Maximum Marks: 100
```

```
print("\nMarks of 2nd and 4th student:\n", marks[[1, 3]])
```

```
Marks of 2nd and 4th student:
 [[ 88  75  52]
 [100  98  97]]
```

```
above_80 = marks > 80
print("\nBoolean Matrix (True if >80):\n", above_80)
```

```
Boolean Matrix (True if >80):
 [[ True  True  True]
 [ True False False]
 [ True  True  True]
 [ True  True  True]
 [False False False]]
```

```
students_above_80 = marks[np.any(above_80, axis=1)]
print("\nStudents scoring above 80 in any subject:\n", students_above_80)
```

```
Students scoring above 80 in any subject:
 [[ 85  90  98]
 [ 88  75  52]
 [ 99  95  85]
 [100  98  97]]
```

```
reshaped = marks.T
print("\nSubject-wise Performance:\n", reshaped)
```

```
Subject-wise Performance:
 [[ 85  88  99 100  56]
 [ 90  75  95  98  65]
 [ 98  52  85  97  75]]
```