

## Numpy Exercises

### Q1. Select the person who is neither the shortest nor tallest from each group of 5

**Problem:** You have 20 people split into 4 groups of 5. Pick the (3rd tallest) from each group.

```
import numpy as np

heights = np.array([160, 170, 180, 150, 165,
                    175, 165, 185, 160, 170,
                    155, 165, 160, 170, 180,
                    180, 190, 185, 175, 160])
```

### Q2. Get top 2 tallest from each group of 4 people

```
heights = np.array([160, 170, 180, 150,
                    175, 165, 185, 160,
                    155, 165, 160, 170])
```

### Q4. From each group of 3, pick only tallest

```
heights = np.array([160, 170, 180,
                    175, 185, 165,
                    155, 165, 150])
```

### Q5. From each group of 4, return height and original index of the shortest person

```
heights = np.array([
    160, 170, 150, 180,
    175, 165, 155, 185
```

```
)
```

**Q6. From each group of 5, return second shortest person**

```
import numpy as np

heights = np.array([
    160, 170, 150, 180, 165,
    175, 165, 185, 160, 170,
    155, 165, 160, 170, 180
])
```

**Q7. For each group of 4, return all but the tallest person**

```
python
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heights = np.array([
    160, 170, 150, 180,
    175, 165, 155, 185,
    165, 150, 155, 160
])
```

**Q8. From each group of 6, return the median height**

```
heights = np.array([
    160, 170, 150, 180, 165, 155,
    175, 165, 185, 160, 170, 155
])
```

**Q9. From each group of 5, return height gap between tallest and shortest**

```
heights = np.array([
    160, 170, 150, 180, 165,
    175, 185, 155, 160, 170
])
```

**Q10. From each group of 3, return person whose height is closest to the group average**

```
heights = np.array([
    160, 170, 165,
    180, 190, 175,
    155, 160, 150
])
```