```
In [1]: #1.create an array of Employee with salary and display the employees whose salary is less than
        import numpy as np

        # Creating an array of employees with their salaries
        employees = np.array([
            ["John", 60000],
            ["Alice", 45000],
            ["Bob", 70000],
            ["Emma", 48000],
            ["David", 52000]
        ], dtype=object)

        # Filtering employees with salary less than 50000
        low_salary_employees = employees[np.array(employees[:, 1], dtype=int) < 50000]

        print("Employees with salary less than 50000:")
        print(low_salary_employees)
```

```
Employees with salary less than 50000:
[['Alice' 45000]
 ['Emma' 48000]]
```

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In [2]: #2. Suppose you have a dataset containing daily temperature readings for a city, and you want
        #where the temperature either exceeded 35 degrees Celsius (hot day) or dropped below 5 degrees
        #Input:
        #temperatures = np.array([32.5, 34.2, 36.8, 29.3, 31.0, 38.7, 23.1, 18.5, 22.8, 37.2,4,25,12,
        import numpy as np

        # Given temperature readings
        temperatures = np.array([32.5, 34.2, 36.8, 29.3, 31.0, 38.7, 23.1, 18.5, 22.8, 37.2, 4, 25, 1.

        # Finding hot days (temperature > 35°C)
        hot_days = temperatures[temperatures > 35]

        # Finding cold days (temperature < 5°C)
        cold_days = temperatures[temperatures < 5]

        print("Hot days (Temperature > 35°C):", hot_days)
        print("Cold days (Temperature < 5°C):", cold_days)
```

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Hot days (Temperature > 35°C): [36.8 38.7 37.2]
Cold days (Temperature < 5°C): [  4.  -4. -12.]
```

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In [3]: #3. Suppose you have a dataset containing monthly sales data for a company, and you want to sp
        #Input: monthly_sales = np.array([120, 135, 148, 165, 180, 155, 168, 190, 205, 198, 210, 225],
        import numpy as np

        # Given monthly sales data
        monthly_sales = np.array([120, 135, 148, 165, 180, 155, 168, 190, 205, 198, 210, 225])

        # Reshaping into quarters (each quarter has 3 months)
        quarterly_sales = monthly_sales.reshape(4, 3)

        print("Quarterly Sales Data:")
        print(quarterly_sales)
```

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Quarterly Sales Data:
[[120 135 148]
 [165 180 155]
 [168 190 205]
 [198 210 225]]
```

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In [ ]:
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