```python
import numpy as np
import matplotlib.pyplot as plt


"""📊 BÖLÜM 1: Şirket Maaş Analizi"""

salary =  np.random.randint(3000, 15001, 500)

max_salary = np.max(salary)
min_salary = np.min(salary)
avr_salary = np.mean(salary)

print(f"maximum salary : {max_salary} TL , index number of employee which earns maximum salary : ", (np.argmax(salary)))
print(f"minimum salary : {min_salary} TL , index number of employee which earns minimum salary : ", (np.argmin(salary)))
print(f"average salary : {avr_salary} TL ")

plt.hist(salary, bins=20, color="blue", edgecolor="black")
plt.xlabel("Salary range")
plt.ylabel("Number of employees")
plt.title("Salary distribution")

departments = np.random.choice([1,2,3],size=500)

salary_engineer = salary[departments ==1]
salary_accounting = salary[departments ==2]
salary_marketing = salary[departments ==3]

avr_engineer_salary = np.mean(salary_engineer)
avr_accounting_salary = np.mean(salary_accounting)
avr_marketing_salary = np.mean(salary_marketing)

print(f"average salary of engineer: {avr_engineer_salary} TL ")
print(f"average salary of accounting: {avr_accounting_salary} TL ")
print(f"average salary of marketing: {avr_marketing_salary} TL ")



"""📈 BÖLÜM 2: Hava Durumu Verileri Üretme ve Analiz """

degree_spring = np.random.randint(5,23,91)
degree_summer = np.random.randint(15,30,91)
degree_autumn = np.random.randint(18,27,91)
degree_winter = np.random.randint(-1,10,91)
degree_year = np.concatenate((degree_spring, degree_summer, degree_autumn, degree_winter))

avr_degree_spring = np.mean(degree_spring)
avr_degree_summer = np.mean(degree_summer)
avr_degree_autumn = np.mean(degree_autumn)
avr_degree_winter = np.mean(degree_winter)
avr_degree_year = np.mean(np.concatenate((degree_spring,degree_summer,degree_autumn,degree_winter)))

print(f"average temperature forecast for spring : {avr_degree_spring} °C")
print(f"average temperature forecast for summer : {avr_degree_summer} °C")
print(f"average temperature forecast for autumn : {avr_degree_autumn} °C")
print(f"average temperature forecast for winter : {avr_degree_winter} °C")
print(f"average temperature forecast for year : {avr_degree_year} °C")

max_degree = np.max(degree_year)
min_degree = np.min(degree_year)

print(f"maximum temperature of the year : {max_degree} °C , {np.argmax(degree_year)}. day")
print(f"minimum temperature of the year : {min_degree} °C , {np.argmin(degree_year)}. day")



"""📉 BÖLÜM 3: Ürün Satış Analizi"""

amount_phone =  np.random.randint(10, 100, 1)
amount_computer =  np.random.randint(10, 100, 1)
amount_earphones =  np.random.randint(10, 100, 1)
amount_watch =  np.random.randint(10, 100, 1)
amount_tablet =  np.random.randint(10, 100, 1)

price_phone =  np.random.randint(10000, 65000, amount_phone)
price_computer =  np.random.randint(15000, 40000, amount_computer)
price_earphones =  np.random.randint(1000, 5000, amount_earphones)
price_watch =  np.random.randint(2000, 5000, amount_watch)
price_tablet =  np.random.randint(3000, 10000, amount_tablet)

total_price_phone = np.sum(price_phone)
```

```python
total_price_computer = np.sum(price_computer)
total_price_earphones = np.sum(price_earphones)
total_price_watch = np.sum(price_watch)
total_price_tablet = np.sum(price_tablet)

print("for 30 days; ")
print(f"total phone sales amount : {amount_phone} , earned from phone sales {total_price_phone} TL")
print(f"total computer sales amount : {amount_computer} , earned from phone sales {total_price_computer} TL")
print(f"total phone sales amount : {amount_earphones} , earned from phone sales {total_price_earphones} TL")
print(f"total phone sales amount : {amount_watch} , earned from phone sales {total_price_watch} TL")
print(f"total phone sales amount : {amount_tablet} , earned from phone sales {total_price_tablet} TL")
```