**Question 1:**

Dataset:

| **Name** | **Age** | **Gender** | **Test 1** | **Test 2** | **Test 3** |
| --- | --- | --- | --- | --- | --- |
| John | 20 | Male | 85 | 90 | 88 |
| Mary | 19 | Female | 90 | 85 | 92 |
| Peter | 21 | Male | 80 | 88 | 85 |
| Emma | 20 | Female | 95 | 92 | 90 |
| Alex | 22 | Male | 88 | 85 | 90 |

Task:

Calculate the average marks of each student across all tests and then calculate the overall average of the class.

**Question 2:**

Dataset:

| **Month** | **Sales** | **Expenses** |
| --- | --- | --- |
| Jan | 10000 | 8000 |
| Feb | 12000 | 10000 |
| Mar | 15000 | 12000 |
| Apr | 13000 | 11000 |
| May | 14000 | 12000 |

Task:

Calculate the net profit for each month and then calculate the percentage increase in net profit from January to February.

**Question 3:**

Dataset:

| Product | Quantity Sold | Price per unit | Expenses per unit |
| --- | --- | --- | --- |
| A | 10 | 5 | 3 |
| B | 15 | 8 | 6 |
| C | 12 | 10 | 8 |

Task:

Calculate the total revenue, total cost, and total profit generated from the sale of each product.

**Question 4:**

Dataset:

| **Employee** | **Hours Worked** | **Hourly Rate** | **Tax Rate** |
| --- | --- | --- | --- |
| John | 40 | 20 | 0.10 |
| Mary | 35 | 25 | 0.15 |
| Peter | 45 | 30 | 0.20 |

Task:

Calculate the total salary, tax, and net salary (In hand) to be paid to each employee.

**Question 5:**

Dataset:

| Day | Temperature( Degree Celsius) | Humidity (%) |
| --- | --- | --- |
| Monday | 25 | 60 |
| Tuesday | 30 | 65 |
| Wednesday | 35 | 70 |
| Thursday | 28 | 68 |
| Friday | 32 | 72 |

Task:

Calculate the average temperature and humidity of the week. Also, calculate the range of temperature and humidity.

**Question 6:**

| Day | Temperature (Degree Celcius) | Humidity (%) |
| --- | --- | --- |
| Monday | 25 | 60 |
| Tuesday | 30 | 65 |
| Wednesday | 35 | 70 |
| Thursday | 28 | 68 |
| Friday | 32 | 72 |

Task:

Calculate the difference in temperature and humidity for each day compared to Monday.

**Question 7:**

Dataset:

| Student | Test 1 | Test 2 | Test 3 |
| --- | --- | --- | --- |
| John | 85 | 90 | 88 |
| Mary | 90 | 85 | 92 |
| Peter | 80 | 88 | 85 |
| Emma | 95 | 92 | 90 |
| Alex | 88 | 85 | 90 |

Task:

Calculate the difference in marks between each student and the highest scorer in each test.

**Question 8:**

Dataset:

| id | Income | expenses | family size | gender | smoking |
| --- | --- | --- | --- | --- | --- |
| 1 | 111625 | 59494 | 3 | M | YES |
| 2 | 52219 | 40000 | 3 | M | YES |
| 3 | 144605 | 90000 | 4 | M | YES |
| 4 | 68369 | 40000 | 3 | M | YES |
| 5 | 76036 | 50000 | 3 | M | NO |
| 6 | 77997 | 55000 | 3 | F | NO |
| 7 | 125849 | 80000 | 3 | F | NO |
| 8 | 124077 | 75000 | 2 | F | NO |
| 9 | 41835 | 30000 | 1 | F | NO |
| 10 | 126184 | 80000 | 4 | F | YES |
| 11 | 144601 | 100000 | 4 | F | YES |
| 12 | 75355 | 60000 | 2 | F | YES |
| 13 | 82459 | 60000 | 2 | M | NO |
| 14 | 85199 | 50000 | 2 | F | NO |
| 15 | 112007 | 62636 | 2 | M | NO |

Task:

Create a Pivot Table to analyze the dataset and answer the following questions:

1. What is the average income and expenses of individuals who smoke compared to those who do not?
2. Is there a difference in the average family size between males and females?
3. What is the total income and expenses of males compared to females?