## Diagonals

Using a **nested list comprehension,** write a program that reads **rows** of a **square** **matrix** and its **elements**, separated by a comma and a space **", "**. You should find the matrix's **diagonals**, prints them and their **sum** in the format:

**"Primary diagonal: {element1}, {element2}, … {elementN}. Sum: {sum\_of\_primary}**

**Secondary diagonal: {element1}, {element2}, … {elementN}. Sum: {sum\_of\_secondary}"**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 3  1, 2, 3  4, 5, 6  7, 8, 9 | Primary diagonal: 1, 5, 9. Sum: 15  Secondary diagonal: 3, 5, 7. Sum: 15 |