New Grader

Given an 2d numpy array A return a tuple of 1d numpy arrays B and C such that B is the row sum of A and C is the column sum of A.

Input Format

an 2d numpy array A

Output Format

return a tuple of 1d numpy arrays B and C

Constraints

- $1 \leq A.shape[0] \leq 1000$
- $1 \leq A.shape[1] \leq 1000$

Sample Input

```
A = np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]])
```

Sample Output

```
(np.array([6, 15, 24]), np.array([12, 15, 18]))
```

Implementation

Goal: Fill in the following function:

```
import numpy as np

def new_grader(A: np.ndarray) -> tuple[np.ndarray, np.ndarray]:
    return ...

if __name__ == "__main__":
    # You can test anything inside this block and can send it to grader
    # The grader will use only the function that you have implemented
    # !!! DO NOT write anything outside this block
    A = np.array([[1, 2, 3], [4, 5, 6], [7, 8, 9]])
    print(new_grader(A))
```