[T12 Q1] Matrix Traversal

Consider the program in the workspace.

1. What does it print out? (A desk check may be helpful here.)
2. Modify the program so that transpose of **A** is printed.
3. Modify your program so that it prints the transpose of **A** using `while` loops.
4. Can you modify your program so that it prints the transpose of **A** by iterating over the rows in **A**?
    - That is, could you print the transpose of **A** using `for row in matrix: ...`?

Scaffold:

```
matrix = [
    [1, 2],
    [3, 4],
    [5, 6]
]  # call this matrix `A`

for i in range(3):
    for j in range(2):
        print(matrix[i][j], end=' ')
    print()

"""
How could the above loop structure be modified, to print the transpose?
The transpose of the above matrix `A` is:
1 3 5
2 4 6
"""
```