Question 1

Given an n x m matrix, return all elements in a spiral order (starting from the top-left corner, moving right, then down, left, and up).

matrix = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
# Output: [1, 2, 3, 6, 9, 8, 7, 4, 5]

Question 2

Given a "target" sequence of characters (e.g., "HELLO WORLD"), simulate the evolution of a random sequence to match the target. You can only use basic Python and no libraries for evolutionary operations like mutation and selection.

Question 3

Apply GBFS

```
d = {'s':[('a',3),('b',2),('c',4)],
    'a':[('d',1)],
    'b':[('e',8),('f',7),('d',1)],
    'c':[('e',1),('j',3)],
    'd':[('f',1),('h',1)],
    'e':[('g',1)],
    'f':[('g',5)],
    'h':[('g',1),('f',3)],
    'j':[('e',2)],
    'g':[]}
```

h_n = {'s':10,'a':8,'b':7}

Result : ['s', 'b', 'e', 'd', 'c', 'f', 'j', 'g'] ['s', 'b', 'e', 'd', 'c', 'f', 'j'] 7

Question 4

Load the data from the CSV file into a Pandas DataFrame.
Calculate total sales per store.
Calculate average sales per product.
Identify the month with the highest total sales.
apply linear regression also plot the regression line