Day – 3 : Arrays- III

Problem 1: Given an m*n 2D matrix and an integer, write a program to find if the given integer exists in the matrix.

```
def search_matrix(matrix, target):
    if not matrix or not matrix[0]:
        return False
    rows = len(matrix)
    cols = len(matrix[0])
    row = 0
    col = cols - 1

    while row < rows and col >= 0:
        if matrix[row][col] == target:
            return True
        elif matrix[row][col] > target:
            col -= 1
        else:
            row += 1

    return False
matrix1 = [
    [1, 3, 5, 7],
    [10, 11, 16, 20],
    [23, 30, 34, 60]
]
target1 = 3
print(search_matrix(matrix1, target1))

matrix2 = [
    [1, 3, 5, 7],
    [10, 11, 16, 20],
```

[23, 30, 34, 60]

]

target2 = 13

print(search_matrix(matrix2,target2))