

Write a python program that determines the location of a saddle point of matrix if one
exists. An $m \times n$ matrix is said to have a saddle point if some entry $a[i][j]$ is the smallest
value in row i and the largest value in j .

```
def find_saddle_point(matrix):  
    rows = len(matrix)  
    cols = len(matrix[0])  
  
    for i in range(rows):  
        min_in_row = min(matrix[i])  
        min_index = matrix[i].index(min_in_row)  
  
        is_saddle_point = True  
        for j in range(cols):  
            if matrix[j][min_index] > min_in_row:  
                is_saddle_point = False  
                break  
  
        if is_saddle_point:  
            return (i, min_index)  
  
    return None
```

```
def main():

    rows = int(input("Enter the number of rows: "))

    cols = int(input("Enter the number of columns: "))


    matrix = []

    for i in range(rows):

        row = list(map(int, input(f"Enter row {i+1} (separated by spaces): ").split()))

        matrix.append(row)


    saddle_point = find_saddle_point(matrix)


    if saddle_point:

        row, col = saddle_point

        print(f"Saddle point found at location ({row}, {col}) with value {matrix[row][col]}.")

    else:

        print("No saddle point found in the matrix.")


if __name__ == "__main__":

    main()
```