**Module Introduction**

Write a program to find the value at a position in the matrix given the current position, the direction to move and number steps to move.

Problem Solving

**Objective**

A matrix and a valid current position (row number and column number) are provided as input. Given a direction (RIGHT is 1, DOWN in 2, LEFT is 3 and UP is 4) and number of steps to move, output the values along the path taken to the new position.

If any position during traversal is out of bounds, including the initial position, output a single -1 in the list and not the values along the path. The matrix is guaranteed to have non-negative numbers. The direction will always be valid and the number of steps will always be > 0.

**Input Format & Example**

**Example 1**

Input:

3 3 --> Matrix size

1 2 3 --> Input matrix of 3 rows

4 5 6

7 8 9

1 1 --> Current Position

1 1 --> Direction, # of steps; In this case move RIGHT by 1 step

Output:

6

**Example 2**

Input:

3 4

1 2 3 4

5 6 7 8

9 10 11 12

0 2

2 2

Output:

7 11