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In [ ]: # Question 3. Python:
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         COMPUTER SCIENCE AND ENGINEERING WITH SPECIALIZATION IN ARTIFICIAL INTELLIGENCE
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           VELLORE INSTITUTE OF TECHNOLOGY, VELLORE CAMPUS , PASSOUT BATCH OF YEAR 2022
         GIT-HUB REPOSITORY LINK FOR SOLUTION CODE OF ATTEMPTED PROBLEM :
         #SOLUTION CODE OF ATTEMPTED PROBLEM : Question 3. Python :
In [3]:
         import random
         import numpy as np
         N = int(input())
         M = int(input())
         n = int(input())
         m = int(input())
         arr = np.random.randint(0, 10, size=(N, M))
         print( arr)
         if N \ge n and M \ge m:
             arr
             ct = 0
             res = arr[0,0]
             for i in range(0, n):
                 for j in range(0, m):
                     if i != n-1:
                         if j != m-1:
                             if arr[i+1, j] < arr[i, j+1]:</pre>
                                 res = res + arr[i+1, j]
                                 print(res)
                             elif arr[i, j+1] < arr[i+1, j]:
                                 res = res + arr[i, j+1]
                                 print(res)
                             else :
                                 res = res + arr[i, j+1]
                                 print(res)
                             ct = ct + 1
                     if j == m-1 and i != n-1:
                         res = res + arr[i+1, j]
                     if i == n-1 and j != m-1:
                         res = res + arr[i, j+1]
                     if i == n-1 and j == m-1:
                         res = res + arr[n-1, m-1]
             print("The Sum of the Optimal ( Minimum Value of Sum ) Path taken as Soution is :", res)
         else:
             print("Invalid Input")
        5
        5
        [[5 2 6 2 1]
          [7 7 5 6 2]
       [0 1 0 7 1]
[4 5 3 7 5]]
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13
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The Sum of the Optimal ( Minimum Value of Sum ) Path taken as Soution is : 57
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