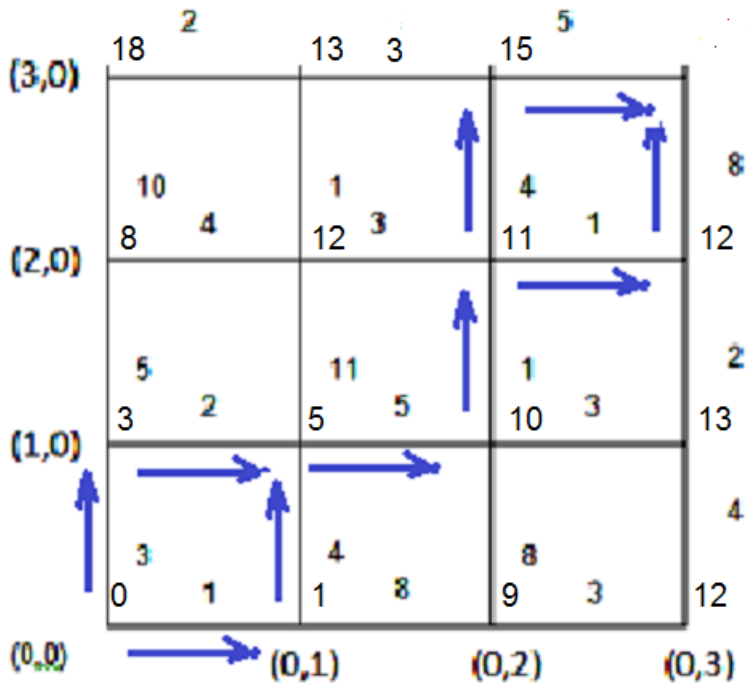




Q1

סה"כ 10 טסטים, כל טסט 2.5 נקודות



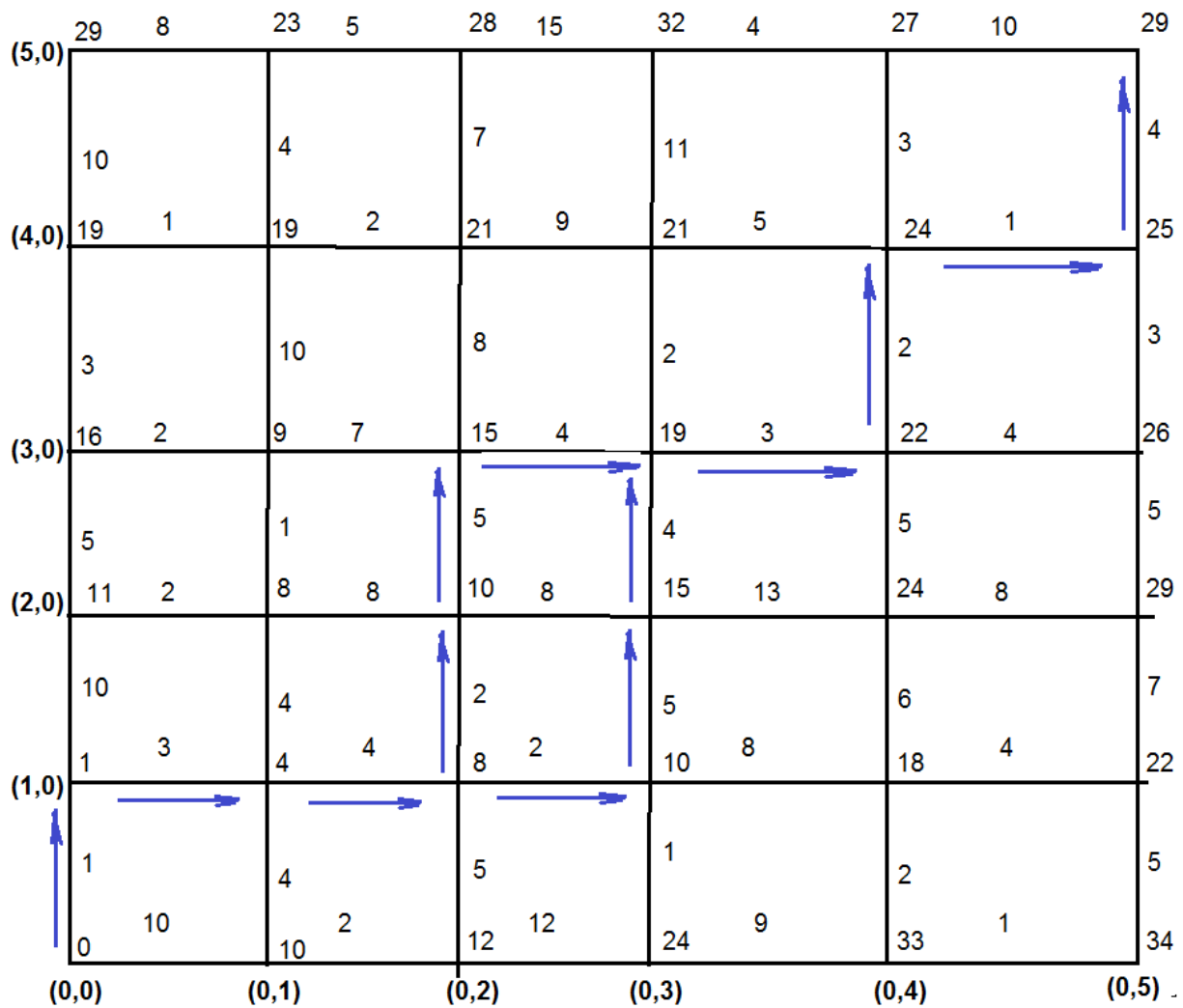
Test1: input A=(1,1), output: true

Test2: input A=(0,0), output: true

Test3: input A=(3,3), output: true

Test4: input A=(3,0), output: false

Test5: input A=(1,3), output: false



Test6. input A=(1,1), output: true

Test7. input A=(3,2), output: true

Test8. input A=(3,3), output: true

Test9. input A=(4,1), output: false

Test10. מטריצה 101*101, משקל כל צלע 1
input A=(50,50), output: true



סה"כ 7 טסטים , כל טסט 5 נקודות

Test1. input: {1,2,3,4,3,2}
output: **6** (כל הסדרה)

Test2. input: {10,9,4,5,4,8,6}
output: **3** (10, 9, 8) or (4, 5, 4) or (4, 5, 6)

Test3. input: {100}
output: **1**

Test4. input: {8, 5, 6, 4, 5, 4, 6, 2, 6, 4, 2, 1, 4, 4, 2, 5, 7, 8, 7, 2}
output: **8** (5, 6, 5, 4, 4, 4, 4, 5)

Test5. input: {1,2,1}
output: **3**

Test6. input:
{6, 16, 19, 9, 18, 18, 3, 5, 13, 12, 19, 13, 13, 3, 3, 7, 19, 1, 11, 16}
output: **5** (19, 18, 18, 19, 9)

Test7. input: {1,2,3, 1,2,3, ... 1,2,3} n=9999 מערך בגודל
output: **$2*n/3+1 = 6667$** (1,2,3,2,3,2,3,...2,3)



LIS 10 נק', 5 טסטים כל טסט 2 נק'

Test_LIS_1. input: {1,11,2,10,4,5,2,1}

output: 4 (1, 2, 4, 5)

Test_LIS_2. input: {8,1,100,101,2,3,4,102,100,101,50};

output: 6 (1,2,3,4,100,101)

Test_LIS_3. input: {0, 1, 101, 9, 10, 11, 2, 3, 100, 4, -1, 5, 6}

output: 7 (0,1,2,3,4,5,6)

Test_LIS_4. input: {1, 2, 9, 13, 15, 17, 24, 26, 35, 37};

output: 10 (כל הסדרה)

Test_LIS_5. input: {1,-1,2,-2,3,-3, ..., n,-n}, n=1000000

output: n/2 (1,2, ..., n)

LDS 10 נק', 5 טסטים כל טסט 2 נק'

Test_LDS_1. input: {1,11,2,10,4,5,2,1};

output: 5 (11,10,5,2,1)

Test_LDS_2. input: {8,1,100,101,2,3,4,102,100,101,50};

output: 3 (102, 100, 50)

Test_LDS_3. input: {0, 1, 101, 9, 10, 11, 2, 3, 100, 4, -1, 5, 6}

output: 4 (101,100,4,-1)

Test_LDS_4. input: {1, 2, 9, 13, 15, 17, 24, 26, 35, 37}

output: 1 (סדרה עולה)

Test_LDS_5. input: {1,-1,2,-2,3,-3, ..., n,-n}, n=1000000

output: n/2+1, (1,-1,-2,-3, ..., -n)

LBS 20 נק', 5 טסטים כל טסט 4 נק'

Test_LBS_1. input: {1,11,2,10,4,5,2,1};

output: 6 (1, 2, 10, 4, 2, 1)

Test_LBS_2. input: {8,1,100,101,2,3,4,102,100,101,50};

output: 7 (1, 2, 3, 4, 102, 100, 50)

Test_LBS_3. input: {0, 1, 101, 9, 10, 11, 2, 3, 100, 4, -1, 5, 6}

output: 8 (0, 1, 9, 10, 11, 100, 4, -1)

Test_LBS_4. input: {1, 2, 9, 13, 15, 17, 24, 26, 35, 37}

output: 10 (כל הסדרה)

Test_LBS_5. input: {0,1,2,...n/2-1,0,-1,-2,..., -n/2+1 }, n=1000000

output: n (כל הסדרה)