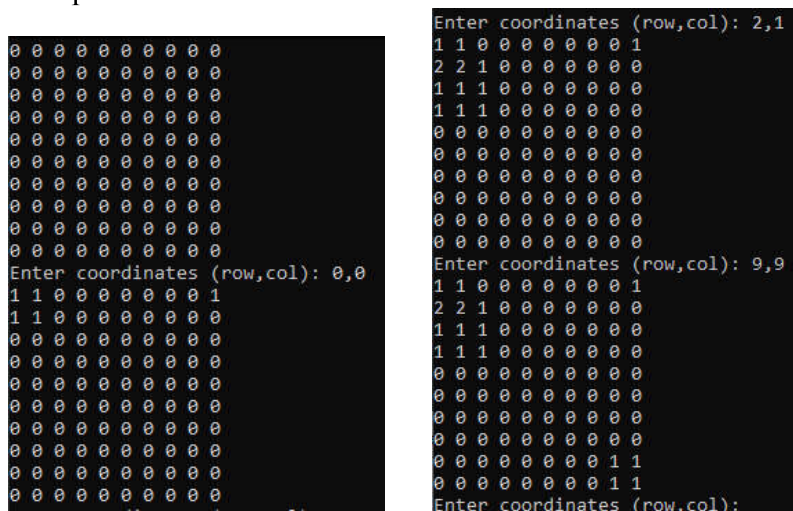


Experiment 3

Q1) Write a C program that does some operations on a 2D matrix. Make all 2D matrix values zero. Take the row and column position for the 2D matrix as input. In the position taken, a 3x3 matrix consisting of 1 should be created and printed on the screen. The matrix should not be reset after each transaction. The program should continue indefinitely and wait for new input. After each input, the last matrix should be printed on the screen. In case of conflict, the numbers should add up. You can examine the example.

Example result:

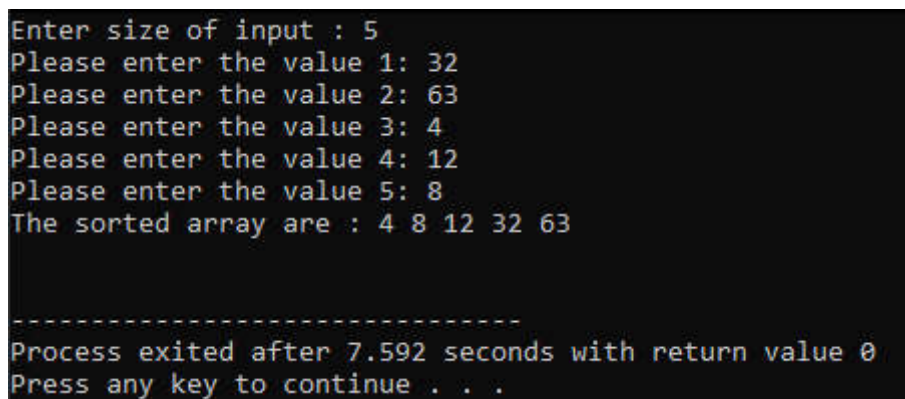


```
Enter coordinates (row,col): 2,1
1 1 0 0 0 0 0 0 0 1
2 2 1 0 0 0 0 0 0 0
1 1 1 0 0 0 0 0 0 0
1 1 1 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
Enter coordinates (row,col): 0,0
1 1 0 0 0 0 0 0 0 1
1 1 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
Enter coordinates (row,col): 9,9
1 1 0 0 0 0 0 0 0 1
2 2 1 0 0 0 0 0 0 0
1 1 1 0 0 0 0 0 0 0
1 1 1 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 0 0
0 0 0 0 0 0 0 0 1 1
0 0 0 0 0 0 0 0 1 1
Enter coordinates (row,col):
```

Q2) Write a C program that takes integers as input and sorts the numbers in ascending order. First ask for length of input integers. Then take that number of integers. And print sorted integers as result. You have to write and use function below for sorting integers.

Prototype: `void sortIntegers(int *nums, int len);`

Example result:



```
Enter size of input : 5
Please enter the value 1: 32
Please enter the value 2: 63
Please enter the value 3: 4
Please enter the value 4: 12
Please enter the value 5: 8
The sorted array are : 4 8 12 32 63

-----
Process exited after 7.592 seconds with return value 0
Press any key to continue . . .
```