Excel Chukwu & Kiitan Doherty

ICP Lab 9

Our main method generates a 101 x 101 array, then generates random index pairs in that array 2000 times using the function populateArray. The number of times a given index pair is chosen is recorded at that index. Then a rectangular region in the array can be chosen to scan for values using the function searchValidEntries. Each non-zero entry is printed along with its index in the array.

Function populateArray(array A, int N) :

for count = 0 to N-1

Generate random number i between 0 and 100

Generate random number j between 0 and 100

Add 1 to the value of A[i][j]

end for

Function searchValidEntries(XL, YL, XH, YH, array A) :

for i = XL to XH

for j = YL to YH

if A[i][j] is not 0

print A[i][j]

end if

end for

end for

Our code can be found at: https://github.com/KiitanD/ICP-Lab-9