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Sheet (3)  
Object Oriented Programming (OOP)  
(C#)

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Given The GUI of a windows form application, Write the C# code for that app.

App 1 :

Lab Exam App 2

ادخال عدد صحيح موجب  
اذا كان يقبل القسمة بدون باقى  
على 3 او 5 او 7 فيوضع فى القائمة المناسبة  
وخلاف ذلك يوضع فى القائمة الاخيره

Enter

3	5	7	لا يقبل القسمة على اى منهم
21	15	21	17
15	35	35	
27			
81			

## App 2 :

Lab Exam App 1

عداد قيمته تتراوح بين 10+ و 10- و قيمته  
الابتدائية تساوي صفر ويمكن زيادة قيمته او  
انقاصها بمقدار واحد صحيح كل مره

عداد

0

اطرح اجمع

### App 3 :

Lab Exam App 3

تطبيق يقبل من المستخدم بيانات  
ويقوم بتصنيفها ووضعها في القائمة المناسبة

ضع العدد في القائمة الصحيحة

عدد صحيح

3  
75

عدد بعلامه عشرية

56.8

نص

test

## App 4 :

Lab Exam App 4

Enter a Positive Integer Number or use the arrows :

7



<< -

+ >>

Go

i	i*2	i*i
1	2	1
2	4	4
3	6	9
4	8	16
5	10	25
6	12	36
7	14	49
28	56	140

## App 5 :

 Algorithm 1.4 Matrix Multiplication 

Fill Matrix A and B :

2	3	4		6	1	8		47	33	53
5	6	7	x	9	5	3	=	98	63	107
8	9	1		2	4	7		131	57	98

Matrix A                      Matrix B                      Matrix C = A x B

## App 6 :

Algorithm 1.2 Add Array Members

20  
12  
13  
12  
23  
14  
18  
21  
13  
18

Generate 10 Positive Integer Random Numbers  
between 11  
and 23

Add Array Members 164

Exit

## App 7 :

Find and count common elements in two unsorted arrays

Set 1

7  
13  
66  
36  
74  
37  
92  
64  
12  
97  
60  
25  
49  
69  
93

Set 2

38  
84  
15  
45  
76  
26  
16  
54  
96  
61  
78  
92  
88  
75  
25

Populate lists with 15  
different integer numbers  
between 1 and 100

No. of matches :

Matches :

Algorithm's PseudoCode :

Perform linear search of one array's elements  
in another array, and find and count common  
elements.

## App 8 :

Sorted Array S :

- 7
- 11
- 18
- 47
- 60
- 61
- 78
- 84
- 87
- 90
- 92

Generate a sorted Array

X : 60

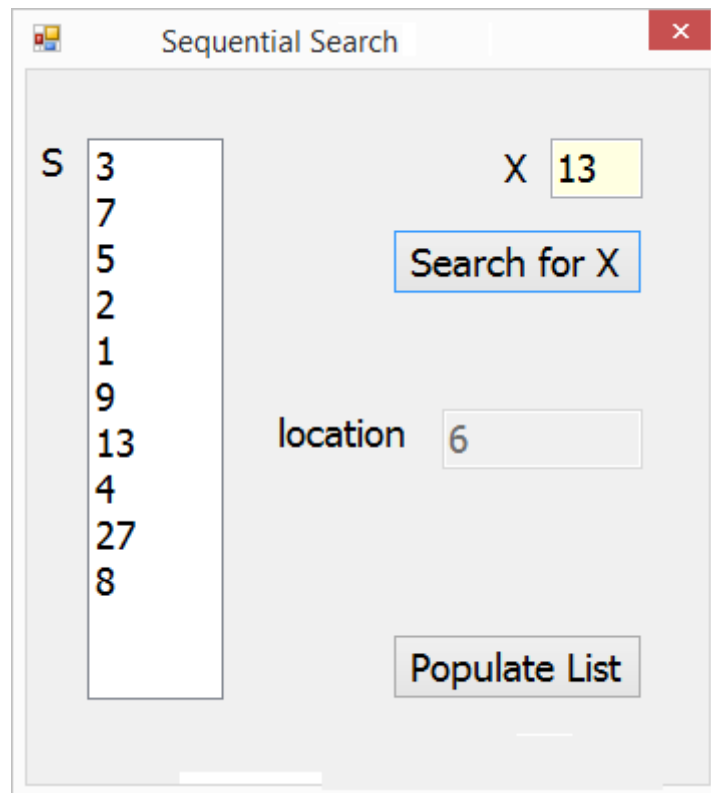
Search for X

Location Of X : 5

Exit



## App 9 :



The image shows a graphical user interface for a 'Sequential Search' application. The window has a title bar with a standard icon, the text 'Sequential Search', and a close button. Inside the window, on the left, is a vertical list labeled 'S' containing the numbers 3, 7, 5, 2, 1, 9, 13, 4, 27, and 8. To the right of the list is a label 'X' followed by a text input field containing the number '13'. Below this is a blue button labeled 'Search for X'. Further down is a label 'location' followed by a text input field containing the number '6'. At the bottom right is a button labeled 'Populate List'.

Sequential Search

S

3  
7  
5  
2  
1  
9  
13  
4  
27  
8

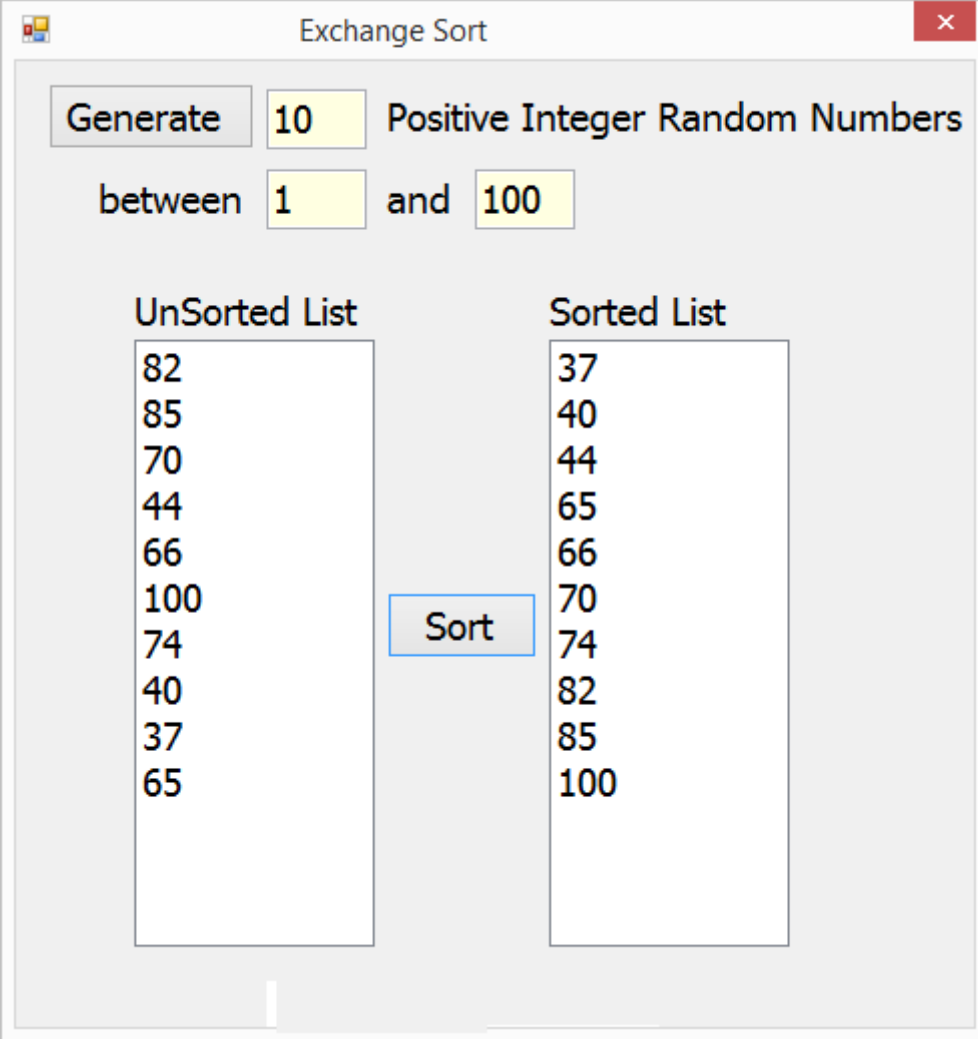
X 13

Search for X

location 6

Populate List

App 10 :



The image shows a software application window titled "Exchange Sort". At the top, there is a "Generate" button, a text input field containing "10", and the text "Positive Integer Random Numbers". Below this, there is another text input field containing "1", followed by the word "and", and a final text input field containing "100". In the center of the window, there is a "Sort" button. To the left of the "Sort" button is a list box titled "UnSorted List" containing the numbers: 82, 85, 70, 44, 66, 100, 74, 40, 37, and 65. To the right of the "Sort" button is another list box titled "Sorted List" containing the numbers: 37, 40, 44, 65, 66, 70, 74, 82, 85, and 100. The numbers in the sorted list are in ascending order.

UnSorted List	Sorted List
82	37
85	40
70	44
44	65
66	66
100	70
74	74
40	82
37	85
65	100

## App 11 :

Sort a List Of Numbers to integers, floats and strings

Enter data :

Classify and Add to the Proper List

Integer Numbers	Floating Numbers	Strings	Statistics :
3 -17	3.6 34.78 -6.5	test	No. of Integer Numbers : 2
			No. of Floating Numbers : 3
			No. of Strings : 1
			Total Numbers : 6

Clear

Exit

## App 12 :

Form1

Populate the list with 40 sorted random integer numbers between 10 and 20

Frequencies

10	10 (3) ###
10	11 (1) #
10	12 (3) ###
11	13 (7) #####
12	14 (5) #####
12	15 (6) #####
12	16 (7) #####
13	17 (2) ##
13	18 (3) ###
13	19 (2) ##
13	20 (1) #

Exit