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**Лабораторна робота №1.5**  
**з дисципліни**  
**«Алгоритми і структури даних»**

Виконав:

Перевірила:

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номер у списку групи: 15

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**Завдання**

## Текст програми:

```
#include <stdio.h>
```

```
int main() {  
  
    int x;  
  
    int arr[8][9] = {  
  
        {12, 9, 8, 21, 44, 2, 49, 18, 6},  
  
        {31, 12, 11, 5, 26, 42, 39, 19, 28},  
  
        {1, 7, 12, 14, 9, 36, 20, 50, 4},  
  
        {31, 16, 37, 12, 13, 45, 10, 27, 23},  
  
        {38, 22, 25, 33, 12, 29, 43, 24, 17},  
  
        {48, 32, 34, 40, 41, 12, 19, 3, 8},  
  
        {2, 9, 45, 7, 14, 50, 28, 12, 39},  
  
        {5, 20, 33, 49, 10, 26, 19, 44, 12}  
  
    };  
  
  
    for (int i = 0; i < 8; i++) {  
  
        for (int j = 0; j < 9; j++) {  
  
            printf("%3d ", arr[i][j]);  
  
        }  
  
        printf("\n"); // Move to the next row  
  
    }  
}
```

```
}

int i, j;

int isPresent = 0;

printf("Enter x: ");

scanf("%d", &x);


for (i = 0; i < 8; i++) {

    isPresent = 0;

    for (j = 0; j < 9; j++) {

        if(x == arr[i][j]) {

            printf("in %d row number %d is at %d index\n", i,x,j);

            isPresent = 1;

        }

    }

    if(isPresent==0) {

        printf("there are no number %d in the %d row\n", x,i);

    }

}

return 0;

}
```

**Тестування програми:**

12	12	8	21	44	2	49	18	6
31	47	11	5	26	42	39	19	28
1	7	46	14	9	36	20	50	4
31	16	37	3	13	45	10	27	23
38	22	25	33	15	29	43	24	17
48	32	34	40	41	0	19	3	8
2	9	45	7	14	50	28	16	39
5	20	33	49	10	26	19	44	30

Enter x:12

in 0 row number 12 is at 0 index

in 0 row number 12 is at 1 index

there are no number 12 in the 1 row

there are no number 12 in the 2 row

there are no number 12 in the 3 row

there are no number 12 in the 4 row

there are no number 12 in the 5 row

there are no number 12 in the 6 row

there are no number 12 in the 7 row

12	12	8	21	44	2	49	18	6
31	47	11	5	26	42	39	19	28
1	7	46	14	9	36	20	50	4
31	16	37	3	13	45	10	27	23
38	22	25	33	15	29	43	24	17
48	32	34	40	41	0	19	3	8
2	9	45	7	14	50	28	16	39
5	20	33	49	10	26	19	44	30

Enter x:30

there are no number 30 in the 0 row  
there are no number 30 in the 1 row  
there are no number 30 in the 2 row  
there are no number 30 in the 3 row  
there are no number 30 in the 4 row  
there are no number 30 in the 5 row  
there are no number 30 in the 6 row  
in 7 row number 30 is at 8 index

12	12	8	21	44	2	49	18	6
31	47	11	5	26	42	39	19	28
1	7	46	14	9	36	20	50	4
31	16	37	3	13	45	10	27	23
38	22	25	33	15	29	43	24	17
48	32	34	40	41	0	19	3	8
2	9	45	7	14	50	28	16	39
5	20	33	49	10	26	19	44	30

Enter x:100

there are no number 100 in the 0 row  
there are no number 100 in the 1 row  
there are no number 100 in the 2 row  
there are no number 100 in the 3 row  
there are no number 100 in the 4 row  
there are no number 100 in the 5 row  
there are no number 100 in the 6 row  
there are no number 100 in the 7 row

12	12	12	12	12	12	12	12	12
31	47	11	5	26	42	39	19	28
1	7	46	14	9	36	20	50	4
31	16	37	3	13	45	10	27	23
38	22	25	33	15	29	43	24	17
48	32	34	40	41	0	19	3	8
2	9	45	7	14	50	28	16	39
5	20	33	49	10	26	19	44	30

Enter x:12

in 0 row number 12 is at 0 index

in 0 row number 12 is at 1 index

in 0 row number 12 is at 2 index

in 0 row number 12 is at 3 index

in 0 row number 12 is at 4 index

in 0 row number 12 is at 5 index

in 0 row number 12 is at 6 index

in 0 row number 12 is at 7 index

in 0 row number 12 is at 8 index

there are no number 12 in the 1 row

there are no number 12 in the 2 row

there are no number 12 in the 3 row

there are no number 12 in the 4 row

there are no number 12 in the 5 row

there are no number 12 in the 6 row

there are no number 12 in the 7 row

12	9	8	21	44	2	49	18	6
31	12	11	5	26	42	39	19	28
1	7	12	14	9	36	20	50	4
31	16	37	12	13	45	10	27	23
38	22	25	33	12	29	43	24	17
48	32	34	40	41	12	19	3	8
2	9	45	7	14	50	28	12	39
5	20	33	49	10	26	19	44	12

Enter x:12

in 0 row number 12 is at 0 index  
in 1 row number 12 is at 1 index  
in 2 row number 12 is at 2 index  
in 3 row number 12 is at 3 index  
in 4 row number 12 is at 4 index  
in 5 row number 12 is at 5 index  
in 6 row number 12 is at 7 index  
in 7 row number 12 is at 8 index