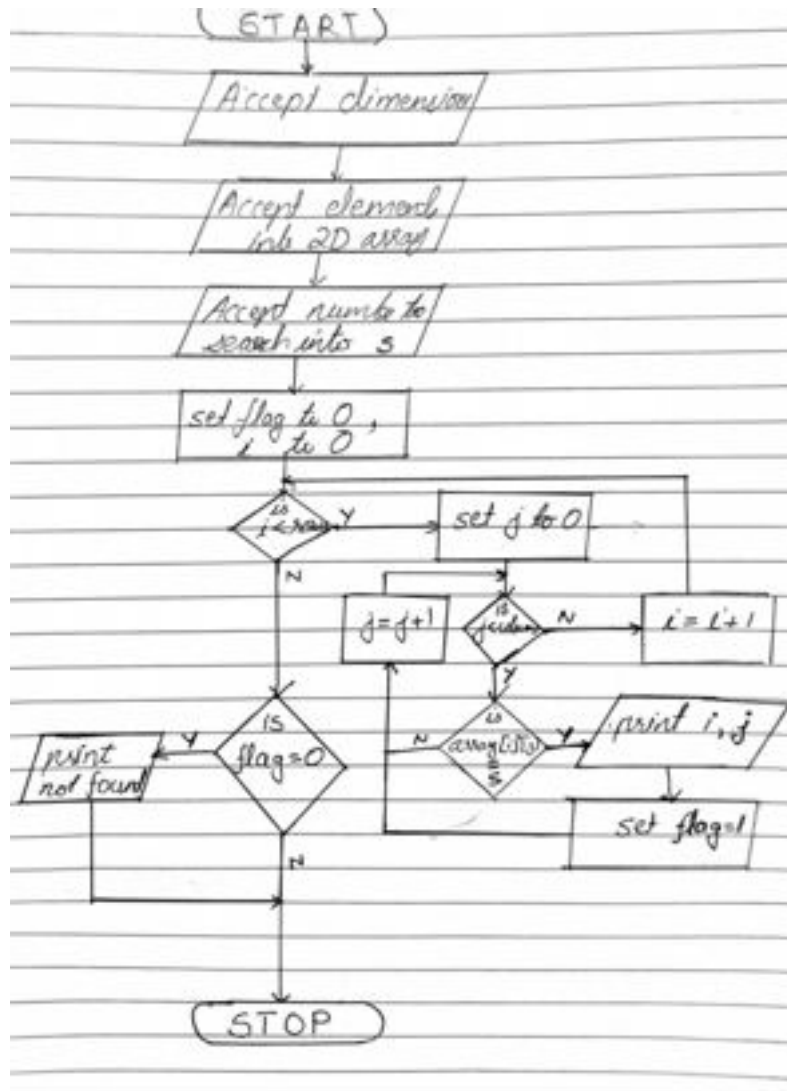


Alfred Jophy

CS27

# 1. Search an element in a two dimensional array

FlowChart



## Source Code

```
/*
 *   To search for an element in a two dimensionl array
 */

#include <stdio.h>

int main(){

    int array[10][10];
    int rows,columns;

    int search_term;

    printf("Enter the number of rows and columns for the 2-D array:\n");
    scanf("%d%d",&rows,&columns);

    printf("Enter the elements of the array : \n");
    for(int i=0;i<rows;i++)
        for(int j=0;j<columns;j++)
            scanf("%d",&array[i][j]);

    printf("\nThe 2D Array\n");
    for(int i=0;i<rows;i++){
        printf("\n");
        for(int j=0;j<columns;j++)
            printf(" %d ",array[i][j]);
    }

    printf("\n\nEnter the number you want to search for : ");
    scanf("%d",&search_term);




    int flag=0;

    for(int i=0;i<rows;i++)
        for(int j=0;j<columns;j++)
            if(array[i][j]==search_term)
                flag=1,printf("Number found at row %d column
↪ %d\n",i+1,j+1);




    if(!flag)
        printf("Number not found in the 2-D array.\n");

    return 0;
}
```

## Output

```
Data_Structures/LabList/1 on  master [!~] 16:38:38
> pwd
/home/ajrx/GitRepos/Github/CollegeStuff/Sem_3/Data_Structures/LabList/1
Data_Structures/LabList/1 on  master [!~]
> ./search.o
Enter the number of rows and columns for the 2-D array:
3
3
Enter the elements of the array :
0
9
1
0
4
5
8
1
1
The 2D Array
0 9 1
0 4 5
0 1 1
Enter the number you want to search for : 1
Number found at row 1 column 3
Number found at row 3 column 2
Number found at row 3 column 3
Data_Structures/LabList/1 on  master [!~] took 12s
> 16:38:59
```

1.

```
Data_Structures/LabList/1 on  master [!~] took 3s 16:39:17
> pwd
/home/ajrx/GitRepos/Github/CollegeStuff/Sem_3/Data_Structures/LabList/1
Data_Structures/LabList/1 on  master [!~]
> ./search.o
Enter the number of rows and columns for the 2-D array:
3
3
Enter the elements of the array :
0
1
5
6
8
1
9
0
5
The 2D Array
0 1 5
6 8 1
9 0 5
Enter the number you want to search for : 2
Number not found in the 2-D array.
Data_Structures/LabList/1 on  master [!~] took 10s
> 16:39:38
```

2.