

c arrays second assignment

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Section or lab : 8

Electrical communication engineering.

Code :

```
#include <stdio.h>

#include <stdlib.h>

//check_and_put(cheked array , new array)

void fill_array(int *arr);

void check_and_put(int *arr1 , int *arr2);

void fill_p_with_arr(int *arr3 , int*p);

void print_array(int *arr6);

int main()

{

    int grid0 [8][8]={0,0};

    int grid1 [8][8]={0,0};

    int grid2 [8][8]={0,0};

    int grid3 [8][8]={0,0};

    fill_array(grid0);

    check_and_put(grid0,grid1);

    check_and_put(grid1,grid2);
```

```
check_and_put(grid2,grid3);

printf(" grid0 :\n");

print_array(grid0);


printf("\n grid1 :\n");

print_array(grid1);


printf("\n grid2 :\n");

print_array(grid2);


printf("\n grid3 :\n");

print_array(grid3);


return 0;
}
```

```
void fill_array(int *arr)
{
    int help_arr[8][8]={0,0};

    int i=0;int j=0;int k=0;int h=0;

    printf("please enter the array elements value as 1 or 0\n");

    for (i=1;i<=6;i++)
    {
        for (j=1;j<=6;j++)
```

```

{
    printf("now you should enter the value of element [%d][%d]=",i,j);
    scanf("%d",&help_arr[i][j]);
    if(help_arr[i][j]!=0 && help_arr[i][j]!=1)
    {
        while(i){
            printf("please enter the element [%d][%d] again as a number of 1 or 0 =",i,j);
            scanf("%d",&help_arr[i][j]);
            if(help_arr[i][j]==0 || help_arr[i][j]==1) break;
        }
    }
}

fill_p_with_arr(&help_arr[0][0],arr);

}

```

```

void fill_p_with_arr(int *arr3, int *p)

```

```

{
    int i=0;int j=0;int k=0;int h=0;

    for(i=1;i<=6;i++){
        k=8*i+1;
        for (j=k;j<=(k+5);j++)

```

```

{
    h=j-k+1;

    arr3+=j;

    p+=j;

    *p=*arr3;

    arr3-=j;

    p-=j;

}

}

}

```

```

void check_and_put(int *arr1 , int *arr2)
{
    int help_arr1[8][8]={0,0};

    int help_arr2[8][8]={0,0};

    int i=0;int j=0;int k=0;int h=0;int counter=0;

    fill_p_with_arr(arr1,&help_arr1[0][0]);

    for(i=1;i<=6;i++){
        for (j=1;j<=6;j++)
        {
            counter=0;

            if(help_arr1[i][j]==1){
                if(help_arr1[i][j+1]==1)counter+=1;

                if(help_arr1[i][j-1]==1)counter+=1;

```

```

        if(help_arr1[i+1][j]==1)counter+=1;

        if(help_arr1[i+1][j+1]==1)counter+=1;

        if(help_arr1[i+1][j-1]==1)counter+=1;


        if(help_arr1[i-1][j]==1)counter+=1;

        if(help_arr1[i-1][j+1]==1)counter+=1;

        if(help_arr1[i-1][j-1]==1)counter+=1;


        if (counter==3 || counter ==2){help_arr2[i][j]=1;}

    }


else if(help_arr1[i][j]==0){

    if(help_arr1[i][j+1]==1)counter+=1;

    if(help_arr1[i][j-1]==1)counter+=1;


    if(help_arr1[i+1][j]==1)counter+=1;

    if(help_arr1[i+1][j+1]==1)counter+=1;

    if(help_arr1[i+1][j-1]==1)counter+=1;


    if(help_arr1[i-1][j]==1)counter+=1;

    if(help_arr1[i-1][j+1]==1)counter+=1;

    if(help_arr1[i-1][j-1]==1)counter+=1;


    if (counter==3)help_arr2[i][j]=1;

}

counter=0;

```

```
    }  
}  
  
fill_p_with_arr(&help_arr2[0][0],arr2);  
}
```

```
void print_array(int *arr6)  
{  
    int i=0;int j=0;  
    int help_arr6 [8][8]={0,0};  
    fill_p_with_arr(arr6,&help_arr6[0][0]);  
    for (i=0;i<=7;i++)  
    {  
        for (j=0;j<=7;j++)  
        {  
            printf("[%d] ",help_arr6[i][j]);  
  
        }  
        printf("\n");  
  
    }  
  
}
```

main.c - Code::Blocks 17.12

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global> main():int

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```
1 #include <stdio.h>
2 #include <stdlib.h>
3 //check_and_put (checked array)
4
5 void fill_array(int *arr)
6 void check_and_put(int *arr)
7 void fill_p_with_arr(int *arr)
8 void print_array(int *arr)
9
10 int main()
11 {
12     int grid0 [8][8]={0,0,0,0,0,0,0,0}
13     int grid1 [8][8]={0,0,0,0,0,0,0,0}
14     int grid2 [8][8]={0,0,0,0,0,0,0,0}
15     int grid3 [8][8]={0,0,0,0,0,0,0,0}
16     fill_array(grid0);
17     check_and_put(grid0,qnow you should enter the value of element
18     check_and_put(grid1,qnow you should enter the value of element
19     check_and_put(grid2,qnow you should enter the value of element
20     check_and_put(grid3,qnow you should enter the value of element
21
22     int i=0 ; int j=0;
23     printf(" grid0 :\n")
24     print_array(grid0);
25     printf("\n grid1 :\n")
26     print_array(grid1);
27
28
29 }
```

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File Line Message

Build file: [0] [1] [1] [1] [0] [0] [0] [0]

In function 'main':

C:\Users\Moham... 16 warning: passing argument 1 of 'fill_array' from incompatible pointer type [-Wincompat...]

C:\Users\Moham... 5 note: expected 'int **' but argument 1s of type 'int (*)[8]'

C:\Users\Moham... 18 warning: passing argument 1 of 'check_and_put' from incompatible pointer type [-Wincom...

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please enter the array elements value as 1 or 0

now you should enter the value of element [1][1]-1

now you should enter the value of element [1][2]-1

now you should enter the value of element [1][3]-1

now you should enter the value of element [1][4]-0

now you should enter the value of element [1][5]-0

now you should enter the value of element [1][6]-0

now you should enter the value of element [2][1]-0

now you should enter the value of element [2][2]-0

now you should enter the value of element [2][3]-0

now you should enter the value of element [2][4]-1

now you should enter the value of element [2][5]-1

now you should enter the value of element [2][6]-1

now you should enter the value of element [3][1]-1

now you should enter the value of element [3][2]-1

now you should enter the value of element [3][3]-1

now you should enter the value of element [3][4]-0

now you should enter the value of element [3][5]-0

now you should enter the value of element [3][6]-0

now you should enter the value of element [4][1]-0

now you should enter the value of element [4][2]-0

now you should enter the value of element [4][3]-0

now you should enter the value of element [4][4]-1

now you should enter the value of element [4][5]-1

now you should enter the value of element [4][6]-1

now you should enter the value of element [5][1]-1

now you should enter the value of element [5][2]-1

now you should enter the value of element [5][3]-1

now you should enter the value of element [5][4]-0

now you should enter the value of element [5][5]-0

now you should enter the value of element [5][6]-0

now you should enter the value of element [6][1]-0

now you should enter the value of element [6][2]-0

now you should enter the value of element [6][3]-0

now you should enter the value of element [6][4]-1

now you should enter the value of element [6][5]-1

now you should enter the value of element [6][6]-1

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10 int main()
11 {
12     int grid0 [8][8]={0,0,0,0,0,0,0,0}
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grid0 :

[0] [0] [0] [0] [0] [0] [0] [0]

[0] [1] [1] [1] [0] [0] [0] [0]

[0] [0] [0] [0] [1] [1] [1] [0]

[0] [1] [1] [1] [0] [0] [0] [0]

[0] [0] [0] [0] [1] [1] [1] [0]

[0] [0] [0] [0] [1] [1] [1] [0]

[0] [0] [0] [0] [1] [1] [1] [0]

[0] [0] [0] [0] [1] [1] [1] [0]

grid1 :

[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]

grid2 :

[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]

grid3 :

[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]

Process returned 0 (0x0) execution time : 14.294 s

Press any key to continue.

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