

REC-CIS

# GE23131-Programming Using C-2024

## Quiz navigation

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<b>Status</b>	Finished
<b>Started</b>	Monday, 23 December 2024, 5:33 PM
<b>Completed</b>	Sunday, 22 December 2024, 12:32 PM
<b>Duration</b>	1 day 5 hours

### Question 1

Correct

Marked out of 1.00

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You are given a two-dimensional 3\*3 array starting from A [0][0]. You should add the alternate elements of the array. The first being sum of A 0 0, A 0 2, A 1 1, A 2 0, A 2 2 and so on.

### Input Format

First and only line contains the value of array separated by single space.



### Output Format

First line should print sum of A 0 0, A 0 2, A 1 1, A 2 0, A 2 2

Second line should print sum of A 0 1, A 1 0, A 1 2, A 2 1

### SAMPLE INPUT

1 2 3 4 5 6 7 8 9

### SAMPLE OUTPUT

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20

Answer: (penalty regime: 0 %)

```

1  #include<stdio.h>
2
3  int main()
4  {
5      int arr[3][3];
6      for(int i=0;i<3;i++)
7      {
8          for(int j=0;j<3;j++)
9          {
10             scanf("%d", &arr[i][j]);
11         }
12     }
13     int odd=0,even=0;
14     for(int i=0;i<3;i++)
15     {
16         for(int j=0;j<3;j++)
17         {
18             if((i+j)%2!=0)
19                 odd+=arr[i][j];
20             else
21                 even+=arr[i][j];
22         }
23     }
24     printf("%d\n%d", even,odd);
25 }

```

	Input	Expected	Got	
	1 2 3 4 5 6 7 8 9	25 20	25 20	
	21 422 423 443 586 645 657 846 904	2591 2356	2591 2356	

Passed all tests!

Question **2**

Correct

Marked out of  
5.00[Flag question](#)

Microsoft has come to hire interns from your college. N students got shortlisted out of which students have been assigned talent levels. Smaller the talent level, lesser is your chance to be where it wants the candidates sorted according to their talent levels, but there is a catch. This first and then male candidates.

The task is to create a list where first all-female candidates are sorted in a descending order and then male candidates in a descending order.

Input Format

The first line contains an integer N denoting the number of students. Next, N lines contain two

The first integer,  $a_i$  will be either 1(for a male candidate) or 0(for female candidate).

The second integer,  $b_i$  will be the candidate's talent level.

Constraints

$$1 \leq N \leq 10^5$$

$$0 \leq a_i \leq 1$$

$$1 \leq b_i \leq 10^9$$

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Output space-separated integers, which first contains the talent levels of all female candidates followed by the talent levels of male candidates in descending order.

SAMPLE INPUT

```
5
0 3
1 6
0 2
0 7
1 15
```

SAMPLE OUTPUT

```
7 3 2 15 6
```

Answer: (penalty regime: 0 %)

```
1 #include<stdio.h>
2
3 struct data
4 {
5     int gen;int tal;
6 };
7
8 int main()
9 {
10     int n;
11     scanf("%d", &n);
12     struct data a[n];
13     for(int i=0;i<n;i++)
14         scanf("%d %d", &a[i].gen, &a[i].tal);
15     for(int i=0;i<n-1;i++)
16     {
17         for(int j=0;j<n-1;j++)
18         {
19             if(a[j].tal < a[j+1].tal)
20             {
21                 struct data
22                 temp = a[j];
23                 a[j] = a[j+1];
24                 a[j+1] = temp;
25             }
26         }
27     }
28     for(int i=0;i<n;i++)
29     {
30         if(a[i].gen==0)
31             printf("%d ",a[i].tal);
32     }
33     for(int i=0;i<n;i++)
34     {
35         if(a[i].gen==1)
36             printf("%d ",a[i].tal);
37     }
38 }
```

	Input	Expected	Got
	5 0 3 1 6 0 2 0 7 1 15	7 3 2 15 6	7 3 2 15 6

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	0 1 0 26 0 39 0 37 0 7 0 13	33 37 28 13 7 1	33 37 28 13 7 1
	12 1 12 1 14 1 18 1 1 1 2 1 3 1 5 1 8 1 9 1 10 0 29 0 31	31 29 18 14 12 10 9 8 5 3 2 1	31 29 18 14 12 10 9 8 5 3 2 1
	12 0 12 1 12 0 12 1 12 0 12 0 12 1 12 0 12 1 12 1 12 0 12 1 12	12 12 12 12 12 12 12 12 12 12 12 12	12 12 12 12 12 12 12 12 12 12 12 12

Passed all tests!

Question **3**

Correct

Marked out of 1.00

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Shyam Lal, a wealthy landlord from the state of Rajasthan, being an old fellow and tired of doing hard work and to live rest of his life with that money. No other farmer is rich enough to buy all his land so he made partitions that could be overlapping. When the farmers came to know about it, they decided to return all the money to the farmers of that land which was down the conflict. All the portion of conflicted land will be taken back by the landlord.

To decide the total compensation, he has to calculate the total amount of money to return to the farmers who purchased from him. Suppose, Shyam Lal has a total land area of **1000 x 1000** equal square units. Now find the total amount of money Shyam Lal to accomplish this task.

**Input Format:**

The first line of the input contains an integer **N**, denoting the total number of land pieces he has. The next **N** lines contain separated integers **(X1, Y1), (X2, Y2)** to represent a rectangular piece of land, and cost per unit area **C**.

**(X1, Y1)** and **(X2, Y2)** are the locations of first and last square block on the diagonal of the rectangle.

**Output Format:**

Print the total amount he has to return to farmers to solve the conflict.

**Constraints:**

$$1 \leq N \leq 100$$

$$1 \leq X1 \leq X2 \leq 1000$$

$$1 \leq Y1 \leq Y2 \leq 1000$$

$$1 \leq C \leq 1000$$

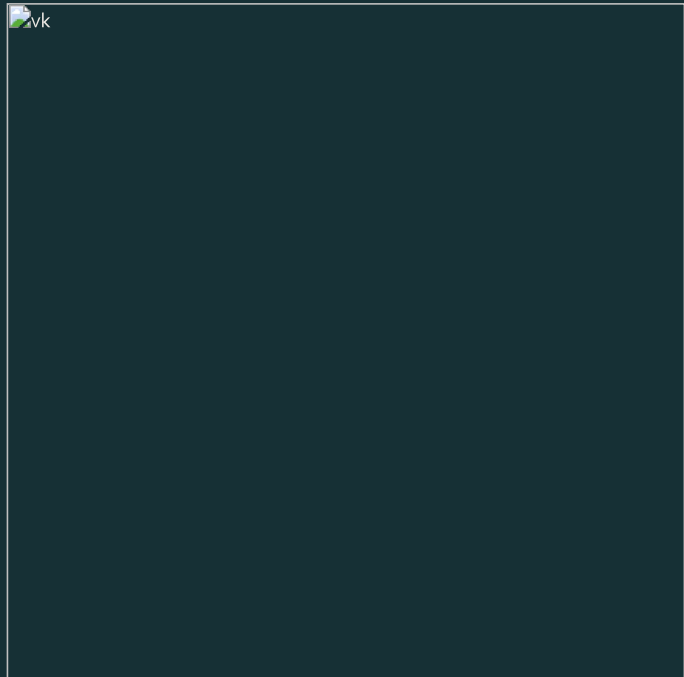
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3  
1 4 4 6 1  
4 3 6 6 2  
2 2 5 4 3

SAMPLE OUTPUT

35

Explanation



For given sample input (see given graph for reference), compensation money for different far

Farmer with land area A:  $C_1 = 5 * 1 = 5$

Farmer with land area B:  $C_2 = 6 * 2 = 12$

Farmer with land area C:  $C_3 = 6 * 3 = 18$

Total Compensation Money =  $C_1 + C_2 + C_3 = 5 + 12 + 18 = 35$

**Answer:** (penalty regime: 0 %)

```
1 #include<stdio.h>
2
3 int main()
4 {
5     int i,j,n,x1,x2,y1,y2,t=0;
6     long long total = 0;
7     int arr[1001][1001] = {0};
8     scanf("%d", &n);
9     while(n--)
10    {
11        scanf("%d %d %d %d %d", &x1, &y1, &x2, &y2, &t);
12        for(i=x1;i<=x2;i++)
13        {
14            for(j=y1;j<=y2;j++)
```

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```
18         arr[i][j]+=t;
19     else if(arr[i][j]>0)
20         arr[i][j]=(-1)*(arr[i][j]+t);
21     else if(arr[i][j]<0)
22         arr[i][j]-=t;
23     }
24 }
25 }
26 for(i=1;i<1001;i++)
27 {
28     for(j=1;j<1001;j++)
29     {
30         if(arr[i][j]<0)
31             total+=arr[i][j];
32     }
33 }
34 printf("%lld\n", (-1)*total);
35 return 0;
36 }
```

	Input	Expected	Got	
	3 1 4 4 6 1 4 3 6 6 2 2 2 5 4 3	35	35	
	1 48 12 49 27 8	0	0	
	3 88 34 99 76 44 82 65 94 100 81 58 16 65 66 7	10500	10500	

Passed all tests!