

WEEK - 9

REC-CIS

MAHALAKSHMI S 2024-CSE M2

Unions
> Week-15-Pointers

Week-09-Two-Dimensional and Multi-dimensional Arrays

Coding

Done

Assessment-09-Two-Dimensional and Multi-dimensional Arrays

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

	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! ✓

```

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

```

	Input	Expected	Got	
✓	5 0 3 1 6 0 2 0 7 1 15	7 3 2 15 6	7 3 2 15 6	✓
✓	6 0 1 0 26 0 39 0 37 0 7 0 13	39 37 26 13 7 1	39 37 26 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! ✓

```

1 #include<stdio.h>
2 int main(){
3     int i, j, n, x1, x2, y1, y2, t = 0;
4     long long total = 0;
5     int arr[1001][1001] = {0};
6     scanf("%d", &n);
7     while(n--){
8         scanf("%d %d %d %d %d", &x1, &y1, &x2, &y2, &t);
9         for(i = x1; i <= x2; i++){
10            for(j = y1; j <= y2; j++){
11                if(arr[i][j] == 0)
12                    arr[i][j] += t;
13                else if(arr[i][j] > 0)
14                    arr[i][j] = (-1) * (arr[i][j] + t);
15                else if(arr[i][j] < 0)
16                    arr[i][j] -= t;
17            }
18        }
19    }
20    for(i = 1; i < 1001; i++){
21        for(j = 1; j < 1001; j++){
22            if(arr[i][j] < 0)
23                total += arr[i][j];
24        }
25    }
26    printf("%lld\n", (-1) * total);
27 }

```

	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! ✓