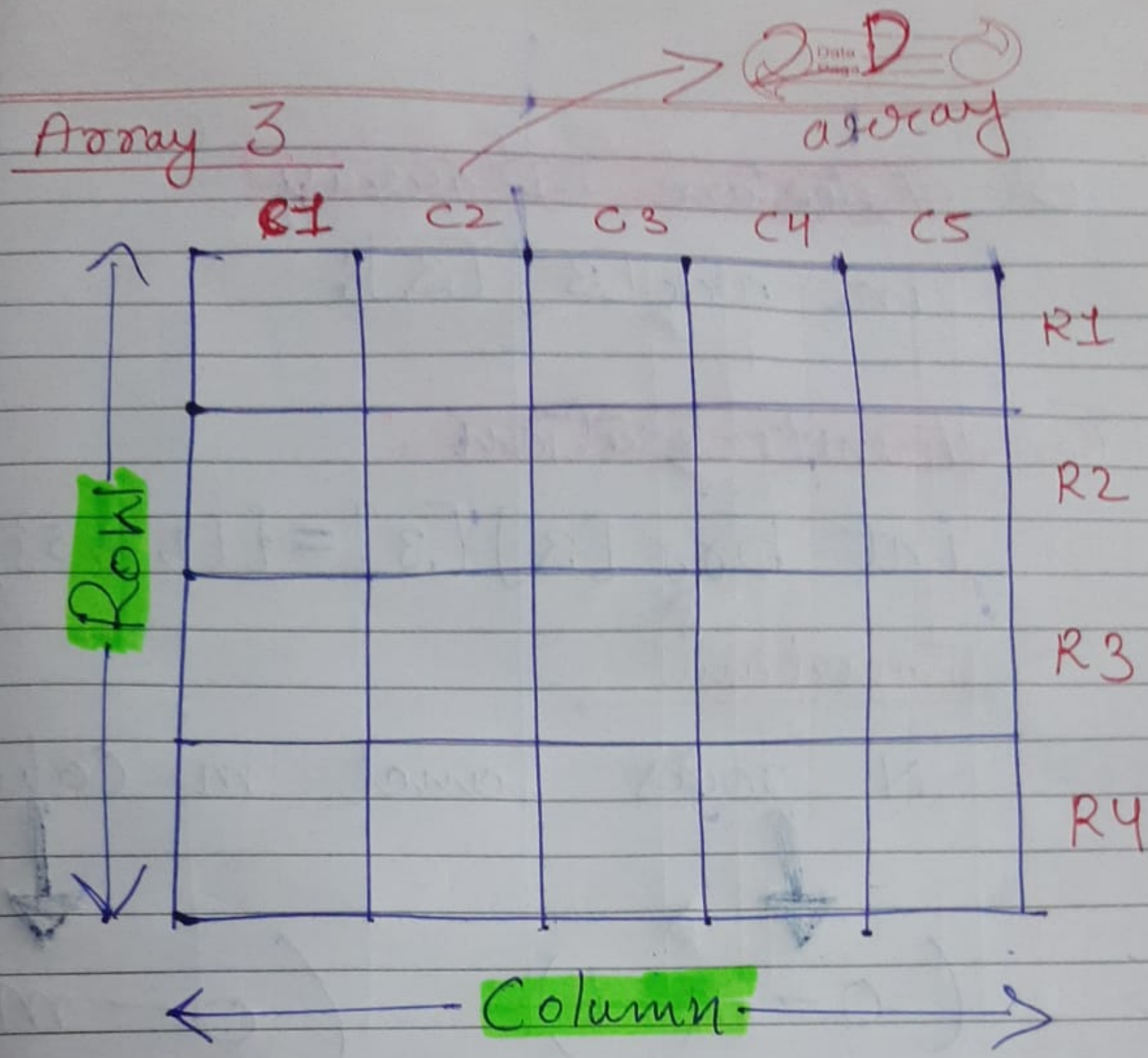
Array 3



→ 2D array

(1) Formula to access the elements in an 2D array

$$(C \times i + j)$$

C → No of Column

j → jth row

i → ith row

② // declare 2D array

int arr[3][3];

③ // initialisation

int brr[3][3] = {{1,2,3}, {4,5,6}, {2,

Important

N rows and m columns

(0 - n-1) (0 - m-1)

Question to perform :-

① declaring 2d array
② Initializing 2d array
③ print 2d array
④ print row wise.
⑤ print column wise.

ans3
ans4
ans5
ans6
ans7
ans8
ans9
ans

qus3 Linear Search in 2D array

qus4 Max and Min element in 2D array

qus5 Transpose of Matrix

4, 5, 6 }, { 2, 4, 8 } };

qus6 Rotate Matrix by 90

qus7 Spriyal print in Matrix

qus8 Wave print.

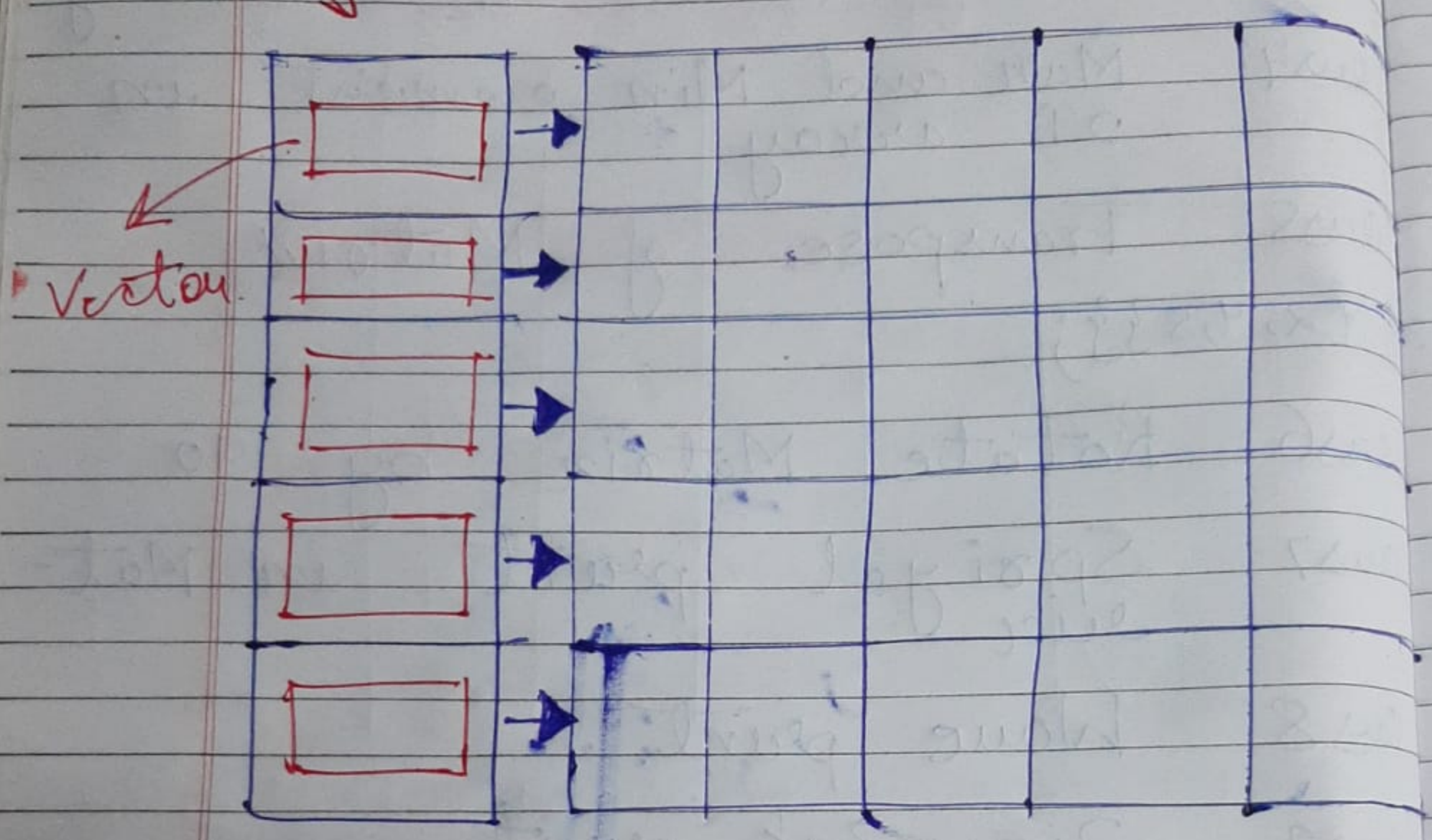
qus9 Ziz-Zak print

qus10 Median in 2D array

2D array using Vector

(1) We can also make vector of vector that can lead to the implementation of a 2D array.

Vector of Vector



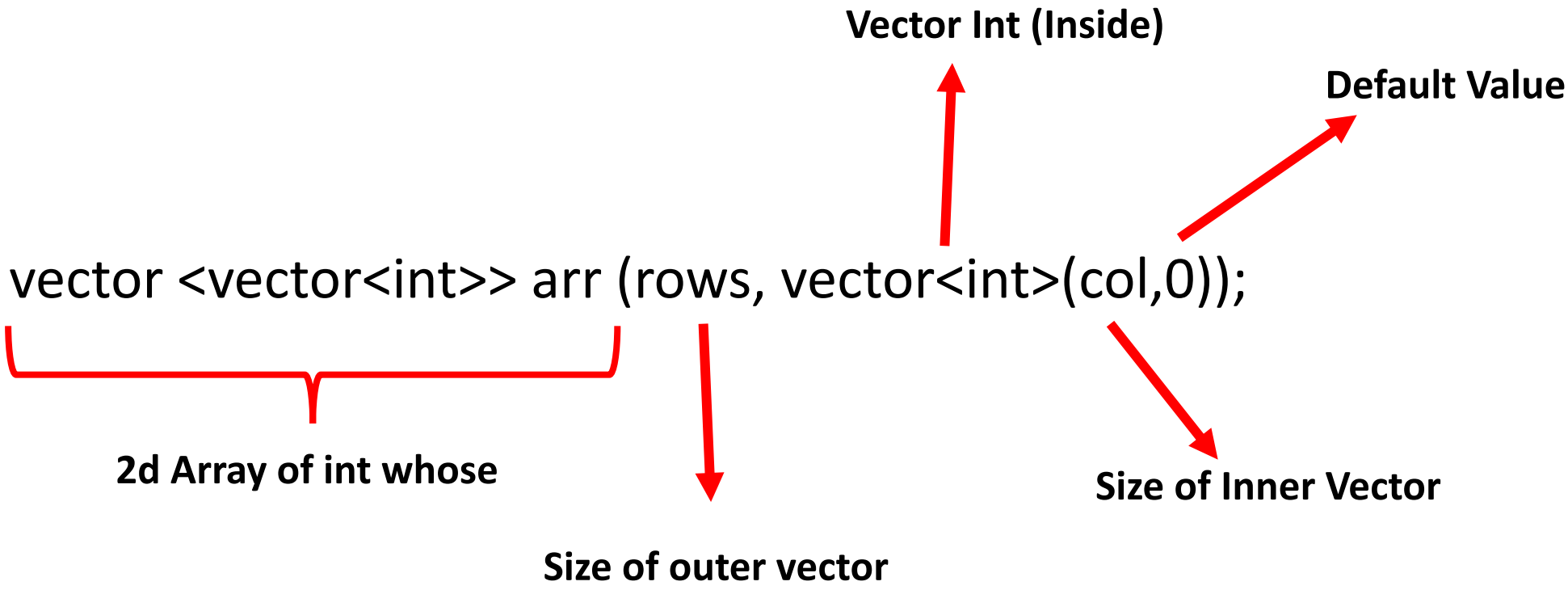
2D vector in Cpp. 3 X 3 Matrix with initial value of 10

```
vector<vector<int>> arr(3, vector<int>(3, 10));
```

(row)

```
for(int i=0; i<arr.size(); i++)
{
```

2D Array using Vector



(column) ←

```
for(int j=0; j<arr[0].size();
                j++){

cout<<arr[i][j]<<" ";
}
cout<<"\n";
}
```