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DBMS

l (2D) arrays in C
ith example

ay. The two dimensional (2D) array in C
A matrix can be represented as a table of
ore about two Dimensional array lets have a

sional(2D) Array

a two dimensional array, we will discuss
rates how to store the elements entered by
the elements of a two dimensional array.

```
*/
```

```
sp[%d][%d]:", i, j);
```

```
ements:\n");
```

D Array

wo Dimensional arrays during declaration.

```
14, 15, 16, 17};
```

are valid, I recommend you to use the first
e you can visualize the rows and columns of

lizing a 2D array

normal **array** (or you can say one dimensional
t to specify the size of it. However that's
always specify the second dimension even if
e declaration. Let's understand this with the

```
ecify second dimension*/

n  mentioned above*/
```

input data into 2D

two dimensional array can have by using this

elements. The array that we have in the
s 5 and 4. These dimensions are known as
ubscript value as 5 and **second subscript**

20 elements.

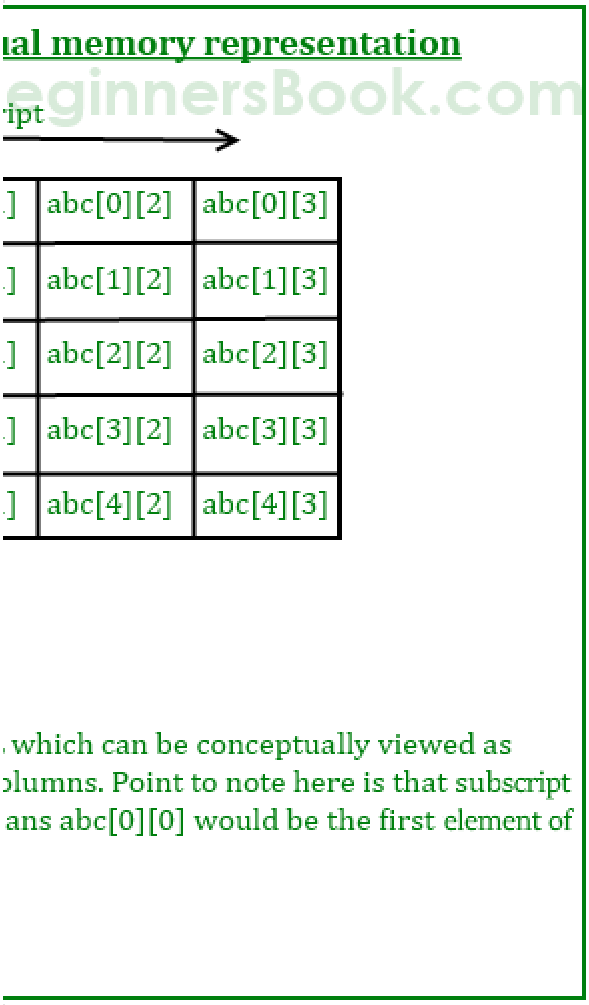
we are using two for loops, one of them is a
0 to the (first subscript -1) and the inner

subscript -1). This way the the order in
be abc[0][0], abc[0][1], abc[0][2]…so on.

```
*/
```

```
:[%d][%d]:", i, j);
```

ıbc of integer type. Conceptually you can



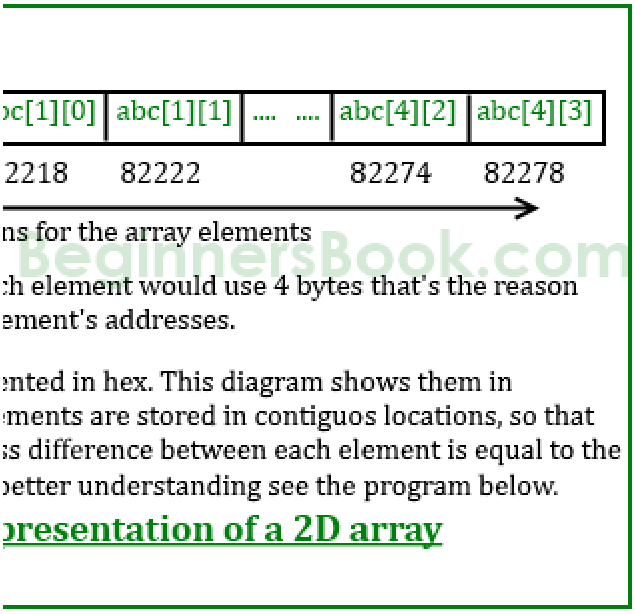
ual memory representation

ipt

]	abc[0][2]	abc[0][3]
]	abc[1][2]	abc[1][3]
]	abc[2][2]	abc[2][3]
]	abc[3][2]	abc[3][3]
]	abc[4][2]	abc[4][3]

, which can be conceptually viewed as
olumns. Point to note here is that subscript
ans abc[0][0] would be the first element of

this array in memory would be something like



:h element would use 4 bytes that's the reason ement's addresses.

ented in hex. This diagram shows them in ›ments are stored in contiguos locations, so that ›s difference between each element is equal to the better understanding see the program below.

presentation of a 2D array

ay

ırray name works as a pointer to the base

However in the case 2D arrays the logic is

a 2D array as collection of several one

irst element of the first row (if we consider

:ss of the first element of the second row. To

program –

```
ying an address would be
 for the demonstration
he address in int so that
 with the diagram above that
nt element uses and how they
 memory locations.
```

```
00101424 1600101440
```

uld be in hex for which we use %p instead of
s is just to show that the elements are
. You can relate the output with the diagram
een these addresses is actually number of
t row.

ongs to the first element of each row abc[0]
 and abc[4][0].

Next ❯

.sorting and searching

.a ,you will get extension about it.

ion array plzzz help

of arrays with output as array of nos.

```
10], second[10][10], sum[10][10];

f rows and columns of Array(2D)\n”);

 of first Array\n”);




 of second Array\n");



;

);


second[c][d];
```

ite.

› a pointer ? I am getting error.

ıceptual memory representation” has the
switched the number of rows and columns.

s!!!

ı I dont no row and column size & this value

e the user can insert fruits and their price
ısional array

lly dont know how to do it

address of particular element in two

rix way on console ?

a sentence in a 2D array. Can you help me

blished. Required fields are marked *

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