

A two-dimensional array of char values.

When creating an array with more than one dimension, you must explicitly state the sizes of all of the dimensions except the first one. In this example, the 3 is required but the 4 isn't.

```
const char buttons[4][3] =
    { { 'a', 'b', 'c' },
      { 'd', 'e', 'f' },
      { 'g', 'h', 'i' },
      { 'j', 'k', 'l' } };

void main()
{ cout << buttons[0][0] << buttons[3][2] << "\n";
```

That prints the three letters a and l.

But for special (non ASCII) characters being displayed in a graphics window, there is a slight complication.

The character constants must be preceded by an L, and the array would have to be declared as int, and only the function `write_char` can handle them.

So we would have something like this instead

```
const int buttons[4][3] =
    { { L'a', L'b', L'c' },
      { L'd', L'e', L'f' },
      { L'g', L'÷', L'i' },
      { L'j', L'k', L'l' } };

write_char(buttons[2][1]);
```

That would display the divide sign sitting where 'h' should be.