

## C Programming - Variables and Arrays

1. A variable in C is a name given to a memory location.
2. Variables must be declared before they are used.
3. An array is a collection of elements of the same type stored at contiguous memory locations.
4. The size of the array must be known at compile time.
5. Arrays can be one-dimensional or multi-dimensional.
6. Example: `int numbers[5];` declares an array of 5 integers.
7. Strings in C are arrays of characters ending with a null character `'\0'`.