ARRAYS

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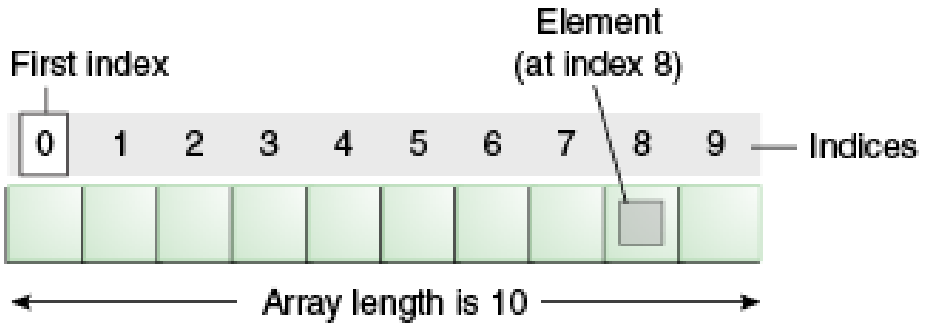
WHAT ARE ARRAYS

- A special variable, which hold many different values at the same time

ELEMENTS AND INDEXES

- One way to think of arrays is box in a line
- Each box would be element
- Each box number would be the index



MAKING ARRAYS DECLARING

DataType name [size]

```
bool everything[42]
```

This sets memory aside
In other words allows
It makes all the boxes so that they can be filled

For size, use a const value,

MAKING ARRAYS INITIALIZING

```
dataType name[size] = {data,data,information}
```

```
string months[10] = {martius, aprilis, Maius,
Lunius, Quintilis, Sextilis, September,
October, november, December}
```

This allow you to set what the array has right from the beginning
If the array has too few, it will set the remain elements to zero
If the array has too many , it will draw an error.

ACCESS INTEGER NOTATION

Name[index]

```
kennysPet[3] = Paco
```

Another way to fill the array is to set each value

Take note of the fact you only need the name of the array and the index value

ACCESS POINTER NOTATION

```
int intarray[] = {5,6,7,8}
cout << *(intArray+3)//prints out 8
```

Here you are accessing the array as a pointer

Note that I am accessing the 4 value in the array
but it has the index value of 3
This is because index starts at value zero.

ACCESS FOR LOOPS

```
for(int I =0; I <size; I++)
{
      Somearray[I]= something
}
```

After you give an array a number it just a normal varable

ARRAY TO FUNCTION DECLARATION

Prototype

```
dataTypeFuntion funtionName (dataType[size]);
```

For the prototype
You just need the
type and the size

```
dataTypeFuntion funtionName ( dataType name[size])
{
// Funtion stuff
}
```

When using it as a parameter
You need the type, a name
and the size

ARRAY TO FUNCTION PASSING

```
functionName(arrayName)
```

That all that needed to pass an array

WORD OF WARNING

- In C++ the array does not keep its max size
  - This means you can go over and overwrite other data,
  - This means you can not predict what affect will happen