

## Static Keyword

Static variables are great because they're initialized once and will only delete at the end of a program.

### Static variable characteristics

- If you're creating a *static int*, it will be automatically initialized to 0 instead of any value when creating a normal *int*
  - Example
    - `static int foo;`
      - Will be equal to 0
    - `int foo;`
      - Will be equal to some random number
- Since a static will be forever an object until the program ends, instantiation in a function for example will not recreate the static variable
  - Example

```
void foo() {  
    // Set to 0 automatically  
    static int temp;  
  
    std::cout << temp << std::endl;  
  
    // Will be 1 on the next function call  
    temp++;  
}
```

### Static function characteristics

- Creates a function within a class that may be used within a **class object** being instantiated