OVERLOADED FUNCTIONS

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REVIEW / DEFINITION

• Sometimes when coding, multiple functions will have the same name.

• If they also have the same return type and input, one will overwrite the other.

 However, if they have different input variables/parameters, then the function becomes overloaded.

HOW OVERLOADED FUNCTIONS WORK DIFFERENTLY

- When a function is overloaded, every iteration will still compile.
- In other words, no function will be overwritten.
- This is because of the different input variables.
- Generally speaking, you should give every function a different name.

EXAMPLE

What will happen if the following is run?

```
int do_a_thing(){
    return 7;
}
char do_a_thing(){
    return 'w';
}
cout << do_a_thing() << endl;</pre>
```

EXAMPLE 2

How about this?

```
bool do_a_thing(int x){
    return (x>10);
}
bool do_a_thing(char c){
    return (c<'w');
}
cout << (do_a_thing('x') || do_a_thing(11))<< endl;</pre>
```