

## C++ Day 5 Commands, Functions, and Tricks:

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while & do/while:

- Purpose: loops a block of code, running it a number of times depending on whether a condition is true
- Note: for the `while` loop, first the condition is tested, then—if the condition is true—the code block is run. The condition is then tested again to see if the block should run another time, and then this is repeated until the condition is false.
- Note: for the `do/while` loop, first the code block is run once, then the condition is tested to see if the block should be run again, and then this is repeated until the condition is false.
- Examples:

- test if variable "num\_chickens\_still\_alive" is greater than 0. If it is greater than zero, run the commands in a block of code. Afterwards, test "num\_chickens\_still\_alive" again and keep running the block repeatedly until is no longer greater than 0

```
while (num_chickens_still_alive > 0)
{
    ...
    [commands to run]
    ...
}
```

- run a block of code once and then—if "num\_chickens\_still\_alive" is greater than 0—run the block repeatedly until "num\_chickens\_still\_alive" is no longer greater than 0

```
do
{
    ...
    [commands to run]
    ...
}
while (num_chickens_still_alive > 0);
```

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