Code 102: Intro to Software Development

Class 08

Agenda

1. Review of previous class
    - Share your learning
2. Computer Logic
    - Recap: Discussion Reading
    - Truth Tables
3. Computer Loops
    - Demo: ‘while’ and ‘for’
    - Lab: Add Features

Agenda

1. **Review of previous class**
    - Share your learning
2. Computer Logic
    - Recap: Discussion Reading
    - Truth Tables
3. Computer Loops
    - Demo: ‘while’ and ‘for’
    - Lab: Add Features

Initial Thought

“A gentle reminder, sucking at something is the first step to learning something new…”

Declare → variables
Define → functions

parameters

```
function addNumbers(num1, num2){
    let total = num1 + num2;
    return total;
}
```

arguments

```
addNumbers(5, 6);
```

<review>

What did you learn?

Agenda

1. Review of previous class
    - Share your learning
2. **Computer Logic**
    - Recap: Discussion Reading
3. Computer Loops
    - Demo: ‘while’ and ‘for’
    - Lab: Add Features

What's a loop?

- Quick and easy way to repeat some code
- A sequence of instructions continually repeated until a condition is reached

What's a "while" loop?

- A loop that will repeat while a certain condition is met
- A type of loop that is repeated UNTIL a condition is achieved

<review>

What did you learn?

What's a "for" loop?

- Repeats for as long as we tell it to
- Repeated a specific amount of times

What does increment mean? → Increase
What does decrement mean? → Decrease

Agenda

1. Review of previous class
    - Share your learning
2. Computer Logic
    - Recap: Discussion Reading
3. **Computer Loops**
    - Demo: ‘while’ and ‘for’
    - Lab: Add Features

A while Loop

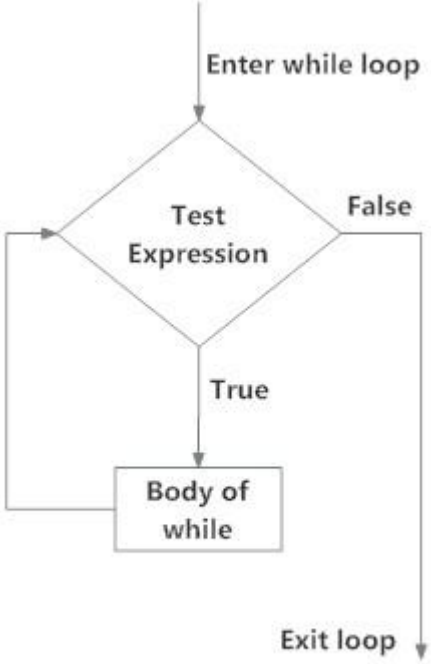

Fig: operation of while loop

Image: https://www.programiz.com/python-programming/while-loop

A for Loop

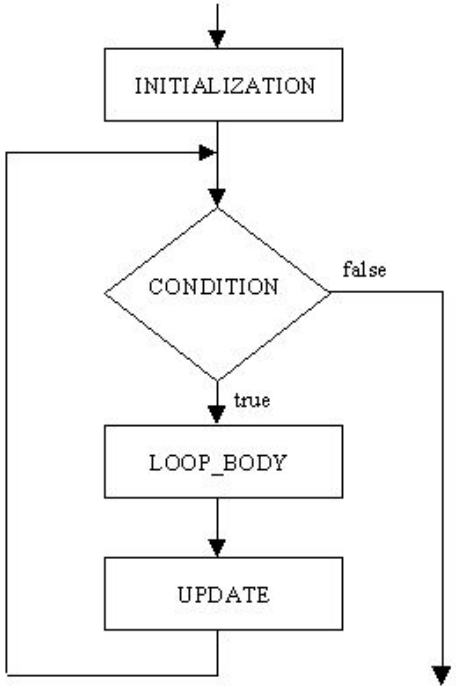

Image: https://clanguageprogrames.blogspot.com/2013/04/syntax-and-flowchart-of-for-loop.html

A for Loop

Initialization condition update/increment

```
for (let i = 0; i <= 12; i = i + 1){
    console.log(i * 8);
}
```

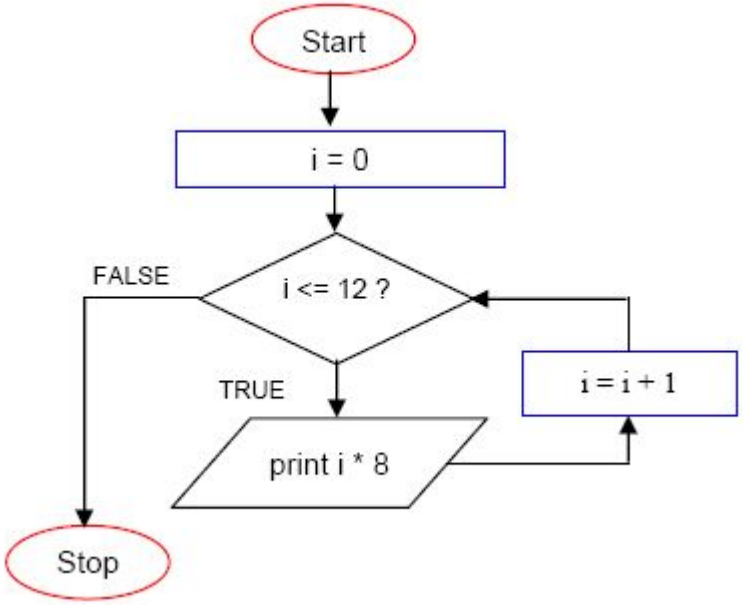

Image: https://www.tenouk.com/clabworksheet/labworksheet7_1.html

<demo>

What can we do with our new skills?

<lab>

Plan it out, then build it out