

# Web Programming 2 - Week3

Base Conversion

AWS Lambda (Cont.)

Bootstrap4 & Font Awesome

# Announcement

- GeekDojo.io - <https://www.geekdojo.io/>
  - All lecture notes (Scratch, Python, JavaScript, Web Programming)
  - Practice areas
    - Typing
    - Binary Operators
    - Programming Challenges

# Week3

- Base Conversion
- AWS Lambda
  - Price
- Bootstrap4 and Font Awesome
  - Quiz: HTML, CSS, Javascript
  - Bootstrap4 and Font Awesome

# Base Conversion: Decimal -> Binary

What is 13 in Binary?

Num ( >> 1)	Num % 2	Result	
13	1	1	('1' + '')
6	0	01	('0' + '1')
3	1	101	('1' + '01')
1	1	1101	('1' + '101')
0	0	Final Result: 1101	

# Base Conversion: Binary -> Decimal

What is 1101 in Decimal?

s = '1101'

s	s[i]	d ( << 1)	Result (Add s[i] * d)	
<hr/>				
110 <b>1</b>	1	1	1 * 1 + 0	= 1
11 <b>0</b>	0	2	0 * 2 + 0	= 1
1 <b>1</b>	1	4	1 * 4 + 1	= 5
<b>1</b>	1	8	1 * 8 + 5	= 13

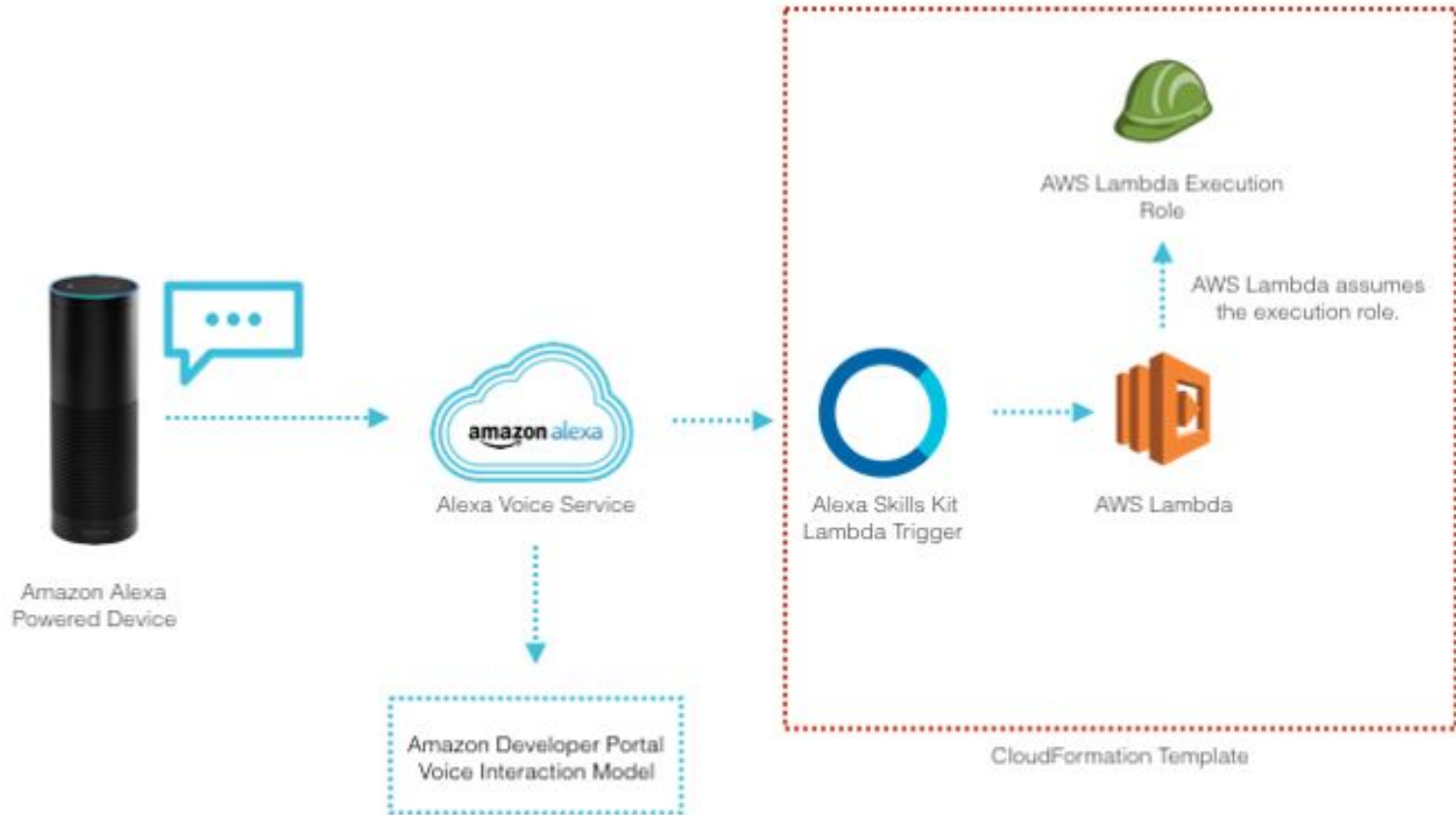
# Base Conversion: Decimal -> Binary

```
def convertToBase2(n):  
    s = ''  
    while n > 0:  
        if n % 2 == 0:  
            s = '0' + s  
        else:  
            s = '1' + s  
        n >>= 1  
    return s
```

## Base Conversion: Binary -> Decimal

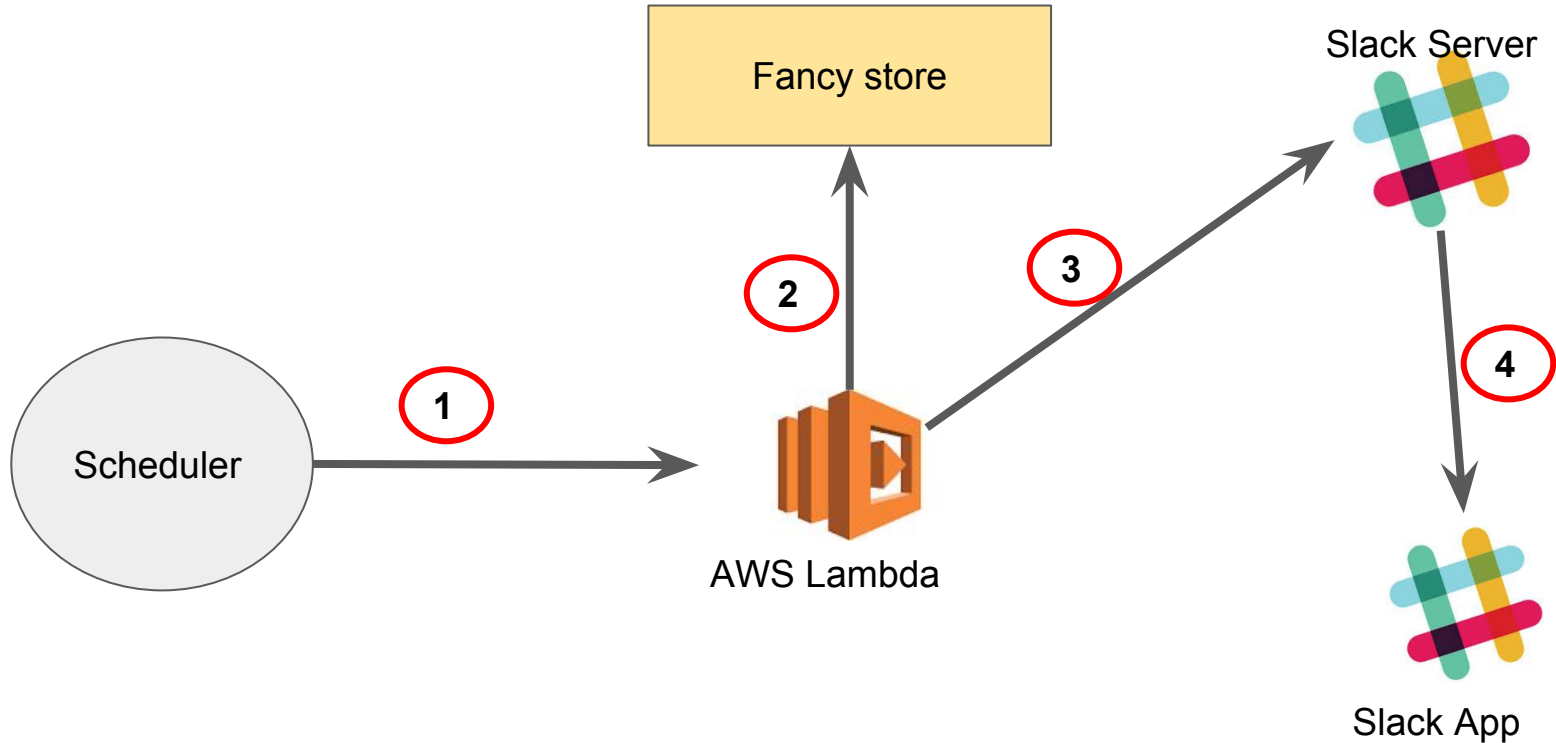
```
def convertBinaryToBase10(s):  
    n = 0  
    d = 1  
    for i in reversed(range(len(s))):  
        n += int(s[i]) * d  
        d <<= 1  
    return n
```

# AWS Lambda - Alexa, Open GeekDojo!





# AWS Lambda - AWS S3 - Slack - Scheduled Job



# Front-end, Back-end



## Full Stack Development

Databases



Cloud Servers



Services



Front End



# HTML, JavaScript, CSS Review

## Quiz:

- <https://www.khanacademy.org/computing/computer-programming/html-css-js/html-css-js-intro/e/quiz--html-css-recap>
- <https://www.khanacademy.org/computing/computer-programming/html-css-js/html-css-js-intro/e/quiz--javascript-recap>

# Bootstrap 4 & Font Awesome

- Speed
- Pre-built blocks

# Install Live Server in VSCode

The screenshot shows the Visual Studio Code interface with the 'EXTENSIONS: MARKETPLACE' sidebar on the left and the 'Extension: Live Server' details panel on the right. The sidebar lists several extensions, with 'Live Server' by Ritwick Dey highlighted. The details panel shows the extension's icon, name, author, version (5.3.1), and a green 'Install' button. Below the 'Install' button are tabs for 'Details', 'Contributions', and 'Changelog'. The 'Details' tab is active, displaying a message from the author and a section titled 'Live Server' with a link to 'Live Server for server side pages like PHP'. At the bottom, there are statistics for the extension, including marketplace version (v5.3.1), downloads (2M), rating (4.8/5), and license (MIT).

File Edit Selection View Go Debug Terminal Help Extension: Live Server - geekdojo-io.github.io - Visual Studio Code

EXTENSIONS: MARKETPLACE

live ser

**VS Live Share** 0.3.1136  
Real-time collaborative development from ...  
Microsoft [Install](#)

**Live Server** 5.3.1  
Launch a development local Server with liv...  
Ritwick Dey [Install](#)

**Live Sass Compiler** 3.0.0  
Compile Sass or Scss to CSS at realtime wit...  
Ritwick Dey [Install](#)

**Team Chat: for Slack, Discord, Live...** 0.10.0  
Send and receive chat messages inside VS...  
karigari [Install](#)

**Live Server Preview** 0.1.4  
Preview your HTML file with localhost serve...  
negokaz [Install](#)

**VS Live Share Extension Pack** 0.2.5  
Collection of extensions that enable real-ti...  
Microsoft [Install](#)

**MIX Live Server** 0.0.1  
Live Server for Web development  
varomix [Install](#)

**VS Live Share Audio** 0.1.48

**Live Server** ritwickdey.liveserver

Ritwick Dey | 2,495,775 | ★★★★★ | Repository | Lice

Launch a development local Server with live reload feature for static & dy...

[Install](#)

[Details](#) [Contributions](#) [Changelog](#)

*[I'm sorry but I'm now super busy, If you want to be a maintainer of the project please feel me to contact me! You've to be passionate about programming]*

**Live Server**

Live Server loves ❤️ your multi-root workspace

[Live Server for server side pages like PHP. Check Here](#)

**\*[For 'command not found error' #78]\***

vscode marketplace v5.3.1 downloads 2M rating 4.8/5 (154)

travis branch [passing](#) appveyor branch [failing](#) license [MIT](#)

master 0 0 0

# Bootstrap 4

- Layout
- Navbar
- Carousel
- Jumbotron
- Cards
- Buttons
- Footer

# Boilderplate for Bootstrap4

- <https://gist.github.com/geekdojo-io/a1d00494a792f6b33dd993ffa8588abd>
- <https://gist.github.com/geekdojo-io/acd8cdb865b155447347070fc4dcf8c4>
- Templates: <https://getbootstrap.com/docs/4.0/examples/>

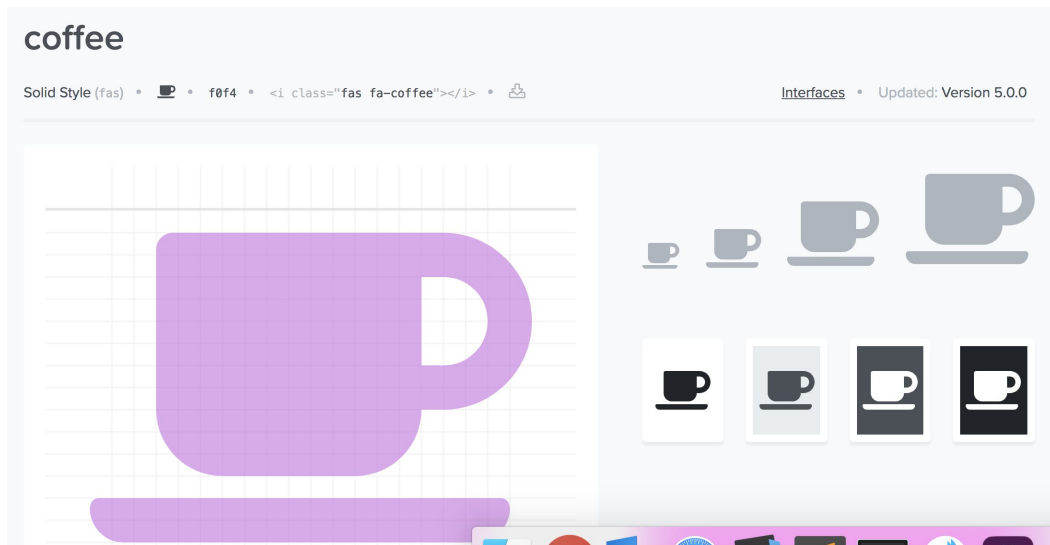
# Boilderplate for Bootstrap4

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- <https://gist.github.com/geekdojo-io/acd8cdb865b155447347070fc4dcf8c4>
- Templates: <https://getbootstrap.com/docs/4.0/examples/>



# Font Awesome

<https://origin.fontawesome.com/>



# Homework

- Build Your Own Homepage (index.html)