```
________object
peration == "MIRROR_X":
mirror_mod.use_x = True
mirror_mod.use_y = False
mirror_mod.use_z = Faise
 operation == "MIRKOR Y"
lrror_mod.use_x ≠ False
irror_mod.use_y = True
mirror_mod.use_z = False
  operation == "MIRROR Z"
  rror_mod.use_x = False
  rror_mod.use_y = False
 ### Irror_mod.use z = True
  Learning Coding
  "Selected" + str(modified
   irror ob.select = 0
  bpy.context.selected_ob
  ata.objects[one.name].se
  Int("please select exact!
  -- OPERATOR CLASSES ----
                      WITH PYTHON
  X mirror to the select
ject.mirror_mirror_X"
                   in not
```

Overview

- Empower every person to be able to code
- Material prepared on the go
- Light Material focused of demonstration and practices
- Aiming to be a live book
- Not just a Kotlin course. Concepts can be applied to any language
- Software Engineering basic concepts overviews
- Some tips about the area, interviewing and best practices
- Focused on fundamentals and essential concepts
- Skip some complex and not so common features
- Not easy, but I will simplify as much as possible
- Need to focus, review and practices
- Lots of practices, exercises and homework's
- Analogy with a gym:)

Course Details

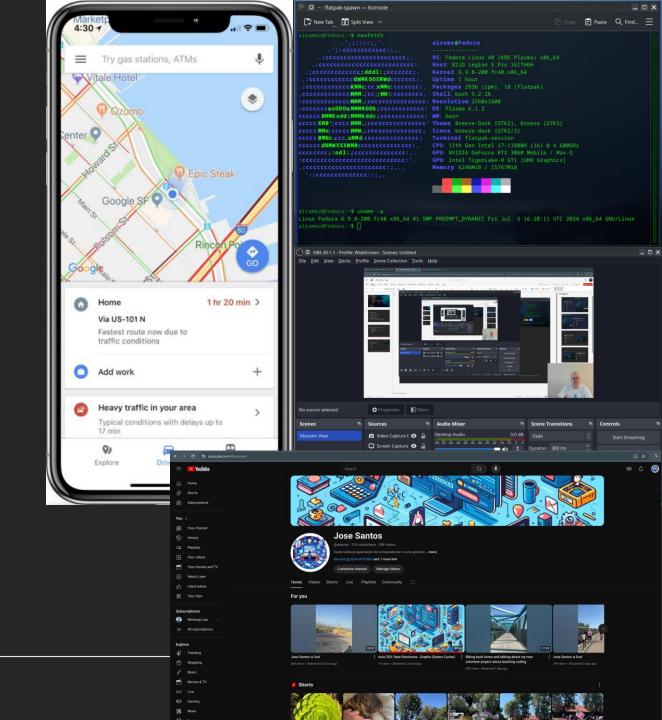
- URL: http://codelearn.live
- Repository: https://github.com/airamez/learn-coding-python
- Every Tuesdays and Thursdays at 8pm PST
- Kotlin as programming language
- VS Code as IDE
- Focus on fundamentals and practices
- Light material and heavy on demos and explanations
- Goal is to cover all content necessary to prepare a Junior Computer Programmer
- At least 600 hours to cover the basics: 300 hours of class + 300 hours of practices

Ongoing course in Portuguese

- I already have a coding course
 - Playlist: http://codando.live
 - Repository: https://github.com/airamez/IntroToCode_CSharp01
 - C# as programming language
 - VS Code as IDE
 - I speak in Portuguese

Application Layers

- User Interface (UI) or Front-End
 - Console
 - Desktop
 - Mobile
 - Web
 - Server-Side
 - Data



Data Processing Model

- Input (data)
- Processing
- Output (information)

Algorithm x Program

- Algorithm: An algorithm is a step-by-step procedure or a set of rules to solve a specific problem or accomplish a certain task in computing. It's like a recipe that describes the exact steps needed for a computer to solve a problem or reach a goal.
- Program: A program, also known as software, is a set of instructions written in a programming language that is used to control the behavior of a machine, often a computer. In essence, a program tells the computer what to do and how to do it.
- A program has to be translate before it can be executed
- Program source => Compiler => Executable code (machine language)

Finding the maximum number in a list

- Algorithm
 - Set the maximum to the first number in the list.
 - For each number in the list:
 - If the current number is greater than the maximum, update the maximum with the current number.
 - The maximum is the largest number in the list.
 - List: 50, 30, 10, 55, 15, 80, 75, 35, 40, 90, 15, 10
 - *Max:?*

Python

```
def find_maximum(numbers):
    maximum = numbers[0]
    for num in numbers:
        if num > maximum:
            maximum = num
    return maximum

numbers = [50,30,10,55,15,80,75,35,40,90,15,10]
print(find_maximum(numbers))
```

Kotlin

```
fun findMaximum(numbers: List<Int>): Int {
    var maximum = numbers[0]
    for (num in numbers) {
        if (num > maximum) {
            maximum = num
        }
    }
    return maximum
}

fun main() {
    val numbers = listOf(50,30,10,55,15,80,75,35,40,90,15,10)
    println(findMaximum(numbers)) // Output: 9
}
```

C#

```
public class Program {
    static int FindMaximum(int[] numbers) {
        int maximum = numbers[0];
        foreach (int num in numbers) {
            if (num > maximum) {
                maximum = num;
            }
        }
        return maximum;
    }
    public static void Main() {
        int[] numbers ={50,30,10,55,15,80,75,35,40,90,15,10};
        Console.WriteLine(FindMaximum(numbers));
    }
}
```

Java

```
public class Program {
    static int findMaximum(int[] numbers) {
        int maximum = numbers[0];
        for (int num : numbers) {
            if (num > maximum) {
                maximum = num;
            }
        }
        return maximum;
    }
    public static void main(String[] args) {
        int[] numbers = {50,30,10,55,15,80,75,35,40,90,15,10};
        System.out.println(findMaximum(numbers));
    }
}
```

Assembly x86

```
section .data
   numbers db 50,30,10,55,15,80,75,35,40,90,15,10
   size equ $-numbers
   maximum db 0
section .text
    global _start
_start:
    ; Initialize maximum to the first number
   mov al, [numbers]
   mov [maximum], al
   ; Loop through each number in the array
   mov ecx, size
   mov esi, numbers
.loop:
    lodsb
    cmp al, [maximum]
   jle .continue
   mov [maximum], al
```

.continue:

```
loop .loop
; Print the maximum number
mov eax, 4
mov ebx, 1
mov ecx, maximum
mov edx, 1
int 0x80
; Exit the program
mov eax, 1
xor ebx, ebx
int 0x80
```

Machine language

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