



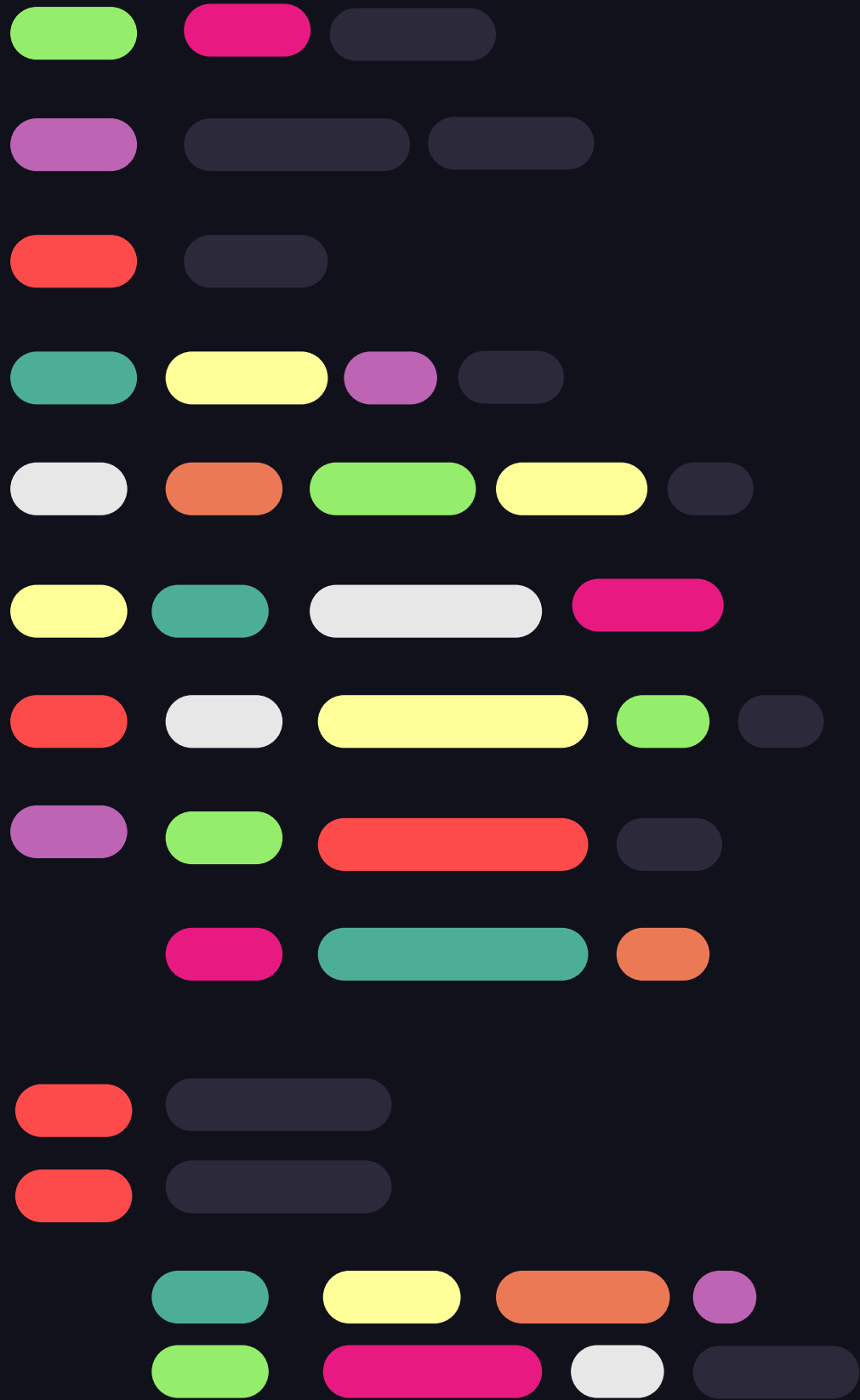
# WashLang

by Lorrان Lopes

< A Programming Language for Washing Machines >



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# 01 { Motivation for WashLang



} .. Inspire



# Motivation



- Laundry is a universal chore, yet programming for it is often overlooked.
- Inspired by the mundane yet essential task of laundry, WashLang bridges the gap between household chores and programming.
- Created to infuse creativity and engagement into programming tasks, moving away from traditional PC-centric programming.





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# Features of WashLang



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# Features

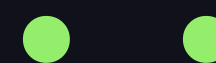


- Tailored specifically for controlling washing machines.
- Allows users to define washing routines with various modes and options.
- Simple syntax inspired by everyday laundry terminology and spoken language.
- Supports loops, conditionals, and expressions for flexible programming.





# 03 { Curiosities of WashLang



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# Curiosities

- Based on the creator's own washing machine functions and routines.



- Except for the 'exibir', because there is no display on his washing machine!





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# Examples of WashLang



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# Practical example 01

## Defining a washing routine:

```
washlang
```

```
selecionar nivel de agua alto;  
selecionar programa de lavagem normal;  
ativar enxague extra;  
ativar turbo performance;  
lavar;  
enxaguar;  
centrifugar;
```

## Output:

```
Nível de água: alto  
Programa de lavagem: normal  
Enxague extra: ativado  
Turbo performance: ativado  
Lavando normal...  
Lavando normal...  
Enxaguando...  
Enxaguando com enxague extra...  
Centrifugando...
```

Setting the water level and selecting the wash mode are prerequisites for starting the wash!

# Practical example 02

Conditional statement based on water level (reserved variable only for reading)

≡ test\_input.txt

```
1  seleccionar nivel de agua alto;  
2  se nivel_de_agua igual a "alto" entao  
3      |    exibir "Nível de água está alto.";  
4  senao  
5      |    exibir "Nível de água não está alto.";  
6  fim;  
7  .
```

**Output:**

```
py .\test_input.txt  
Nível de água: alto  
Nível de água está alto.  
PS C:\Users\lorra\OneDrive\
```

# Practical example 03

## Loops

test\_input.txt

```
1 definir tempo_de_ciclo como 3;
2
3 enquanto tempo_de_ciclo maior que 0 faca
4     exibir "Tempo restante: ";
5     exibir tempo_de_ciclo;
6     definir tempo_de_ciclo como tempo_de_ciclo menos 1;
7 fim;
8
9 exibir "Lavagem completa!";
```

## Output:

```
> python .\main.py .\test_input.txt
Tempo restante:
3
Tempo restante:
2
Tempo restante:
1
Lavagem completa!
```

# Practical example 04

## Arithmetic Basics

≡ test\_input.txt

```
1  exibir 1 mais 2;  
2  exibir 4 menos 3;  
3  exibir 5 vezes 6;  
4  exibir 8 dividido por 2;  
5  
```

## Output:

```
> python .\main.py .\test_input.txt  
3  
1  
30  
4
```



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