Fundamentals of Computer Science

Exercise Session 12

12.5.2020

What do we do today

- Review Assignment 9
- Logic gates
- Repetition of programing basics
- Repetition OOP
- Assignment 5 / Networking stack
- Repetition Data Science basics
- Your questions

You have learned quite a lot …

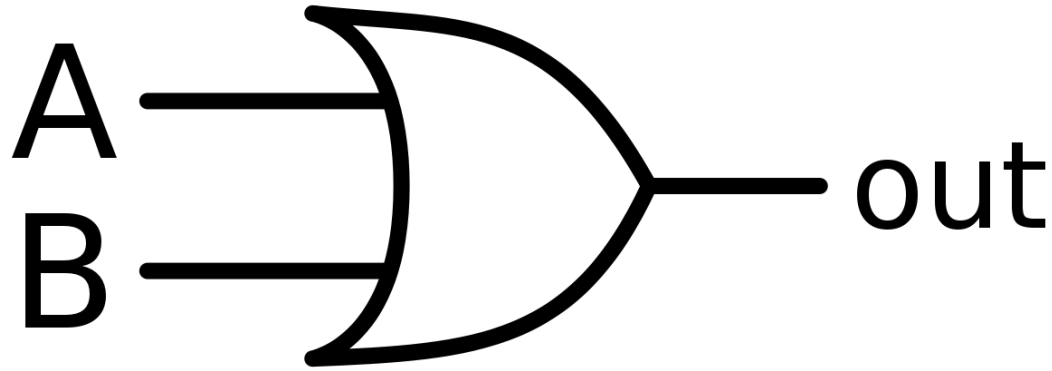
… now just study!

https://fcs-overview.herokuapp.com/

Assignment 9

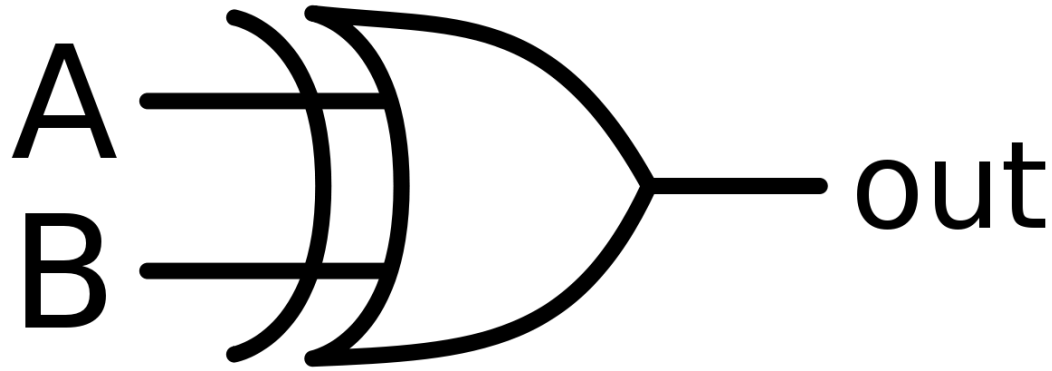
Logic gates – OR

A	B	out
0	0	0
0	1	1
1	0	1
1	1	1



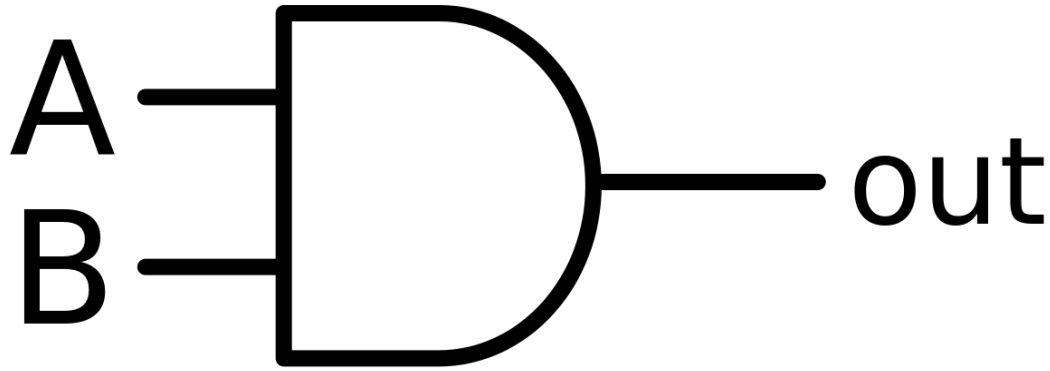
Logic gates – XOR

A	B	out
0	0	0
0	1	1
1	0	1
1	1	0



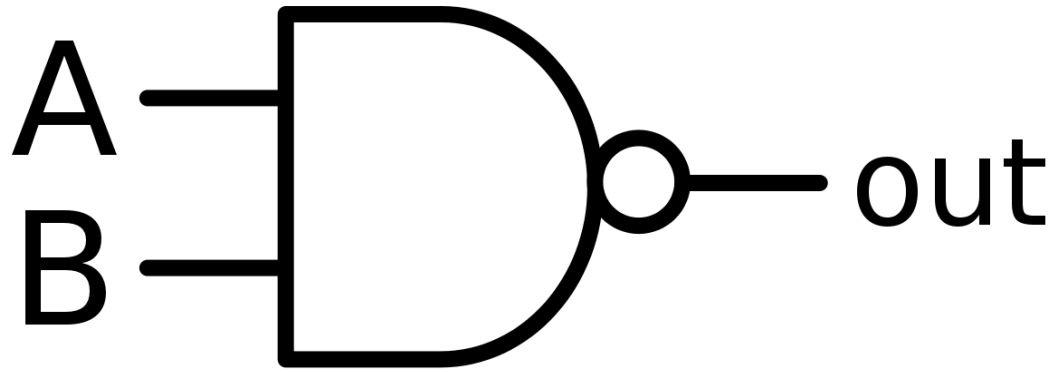
Logic gates – AND

A	B	out
0	0	0
0	1	0
1	0	0
1	1	1



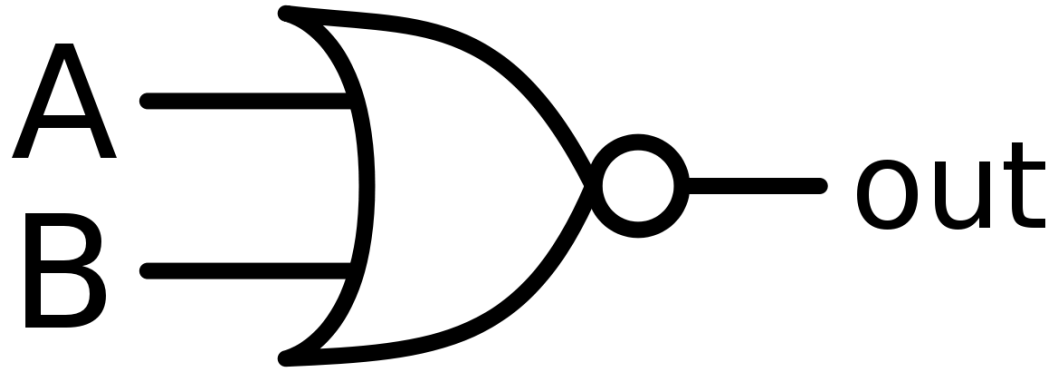
Logic gates – NAND

A	B	out
0	0	1
0	1	1
1	0	1
1	1	0



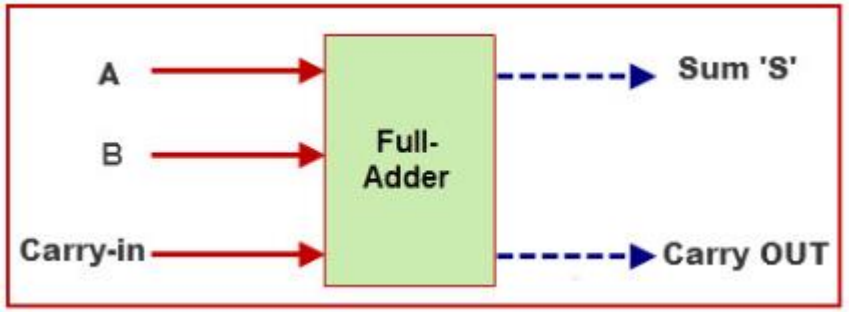
Logic gates – NOR

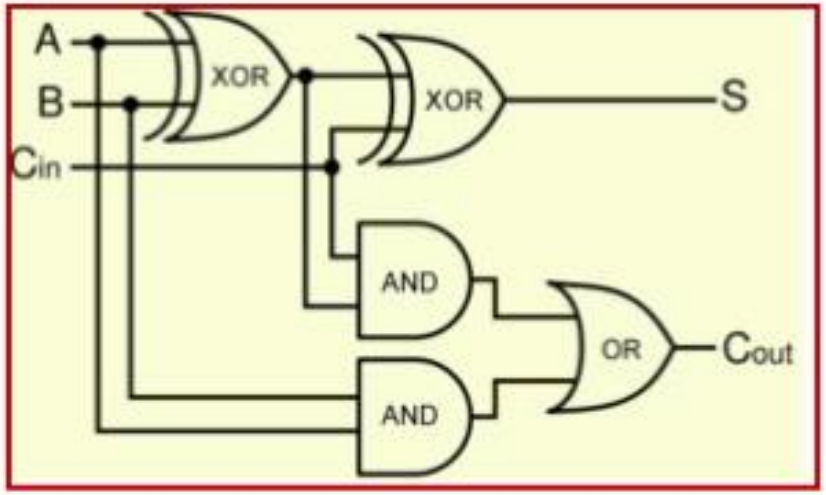
A	B	out
0	0	1
0	1	0
1	0	0
1	1	0



Full-Adder

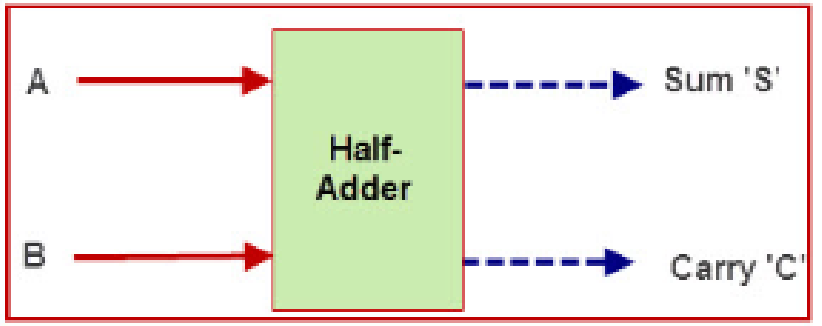
```
  1  1  1    1    1
    01010101
+   10110101
-----------
   100001010
```

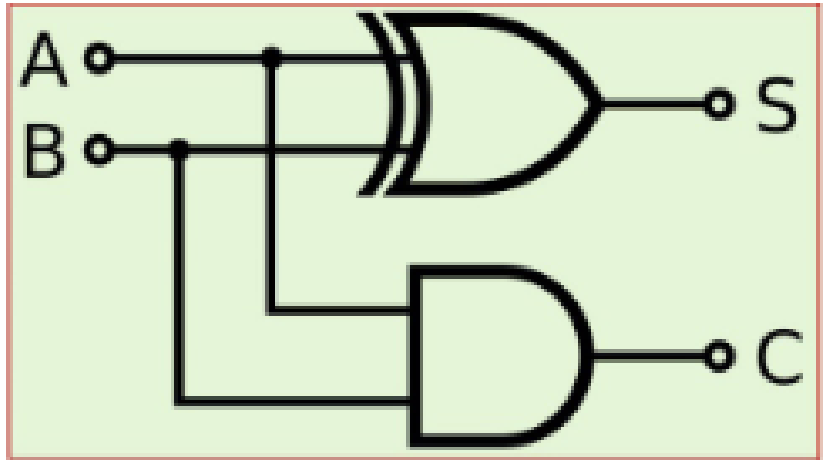




Half-Adder

```
  1  1  1    1    1
   01010101
+  10110101
-----------
  100001010
```

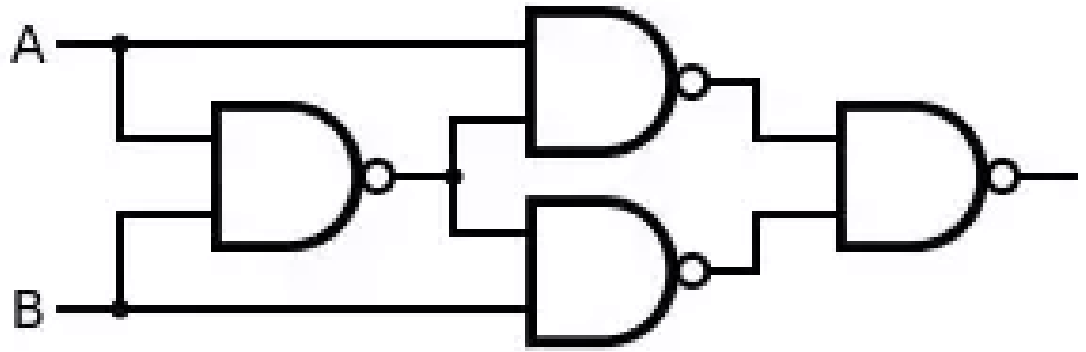




Which logic gate is shown below?

XOR

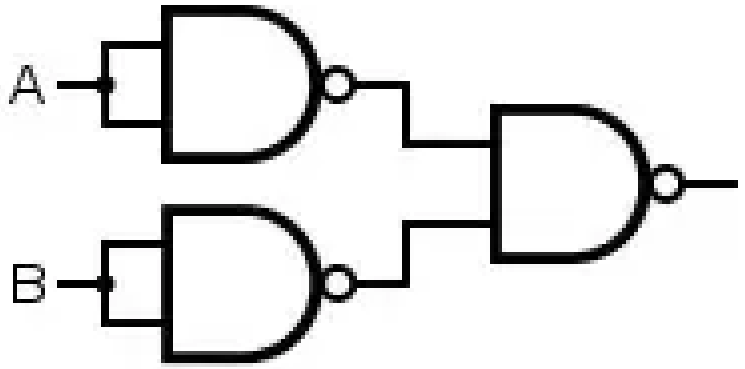
A	B	out
0	0	0
0	1	1
1	0	1
1	1	0



Which logic gate is shown below?

OR

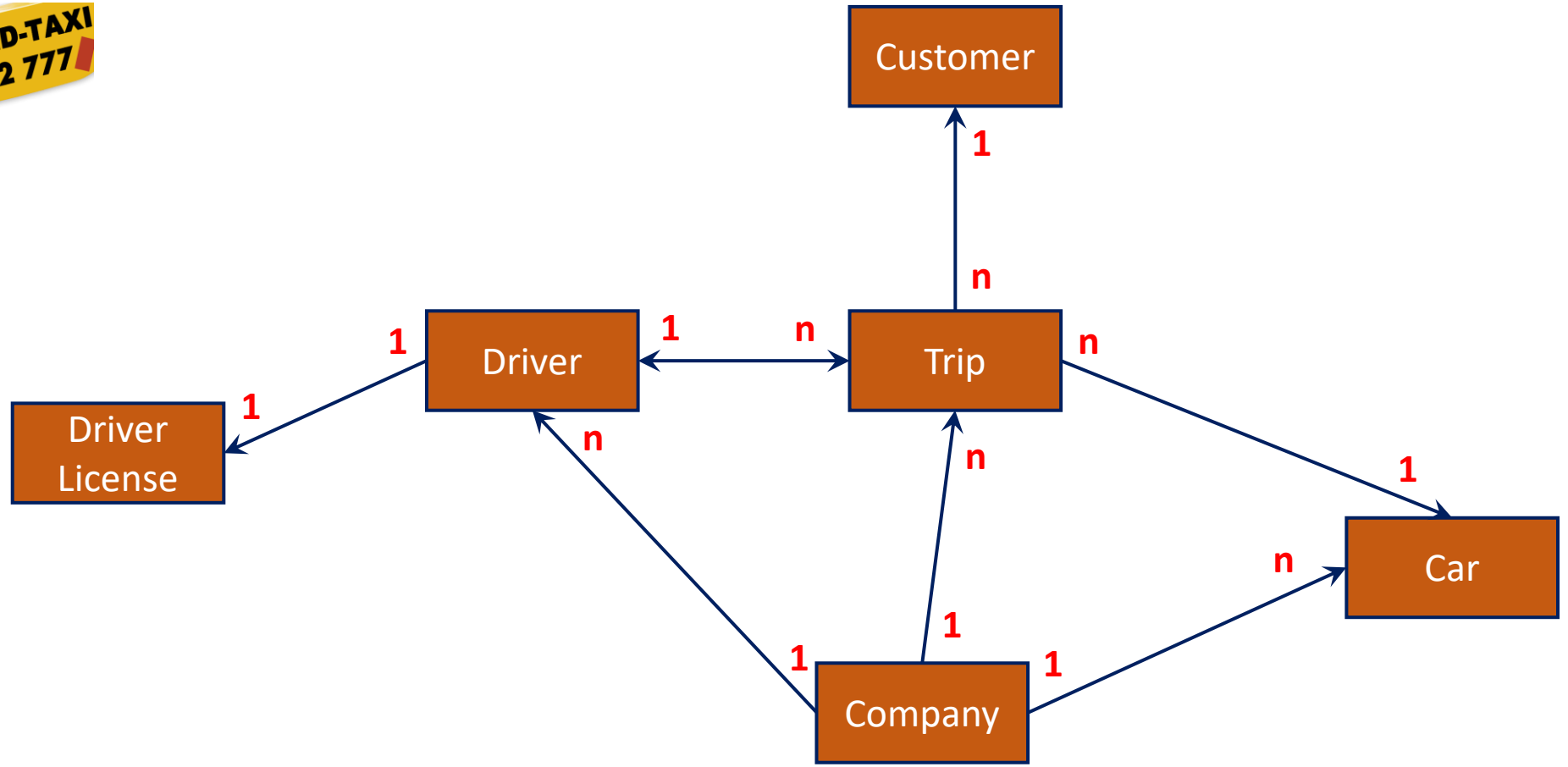
A	B	out
0	0	0
0	1	1
1	0	1
1	1	1



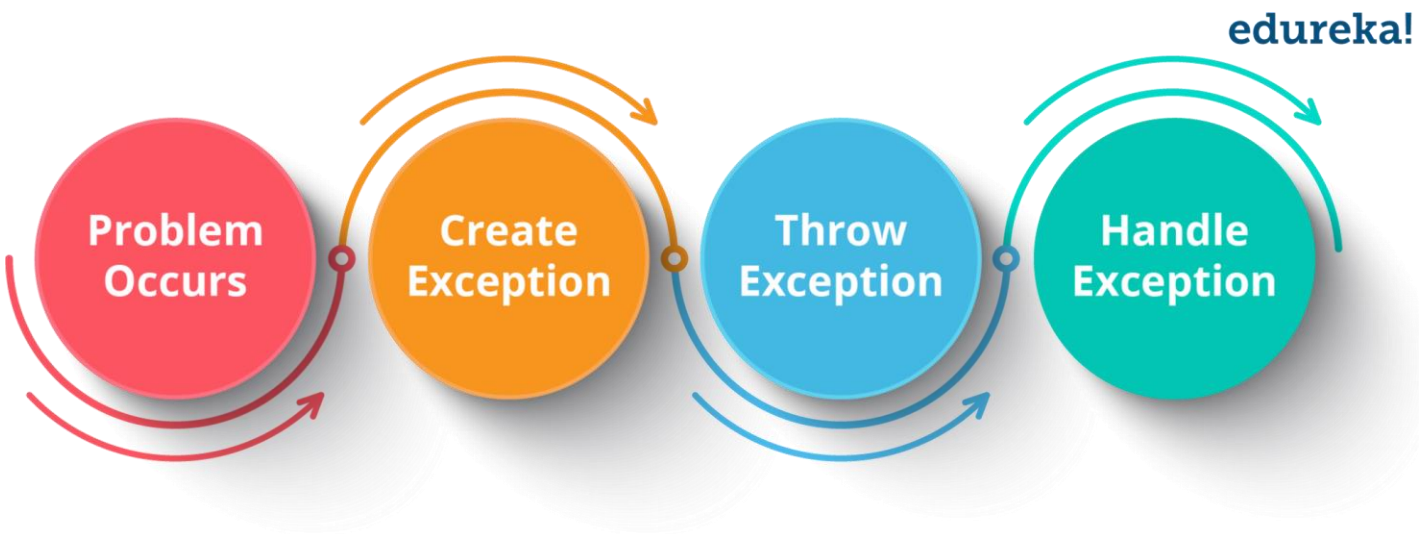
Repetition functional programing

Repetition OOP

Repetition OOP



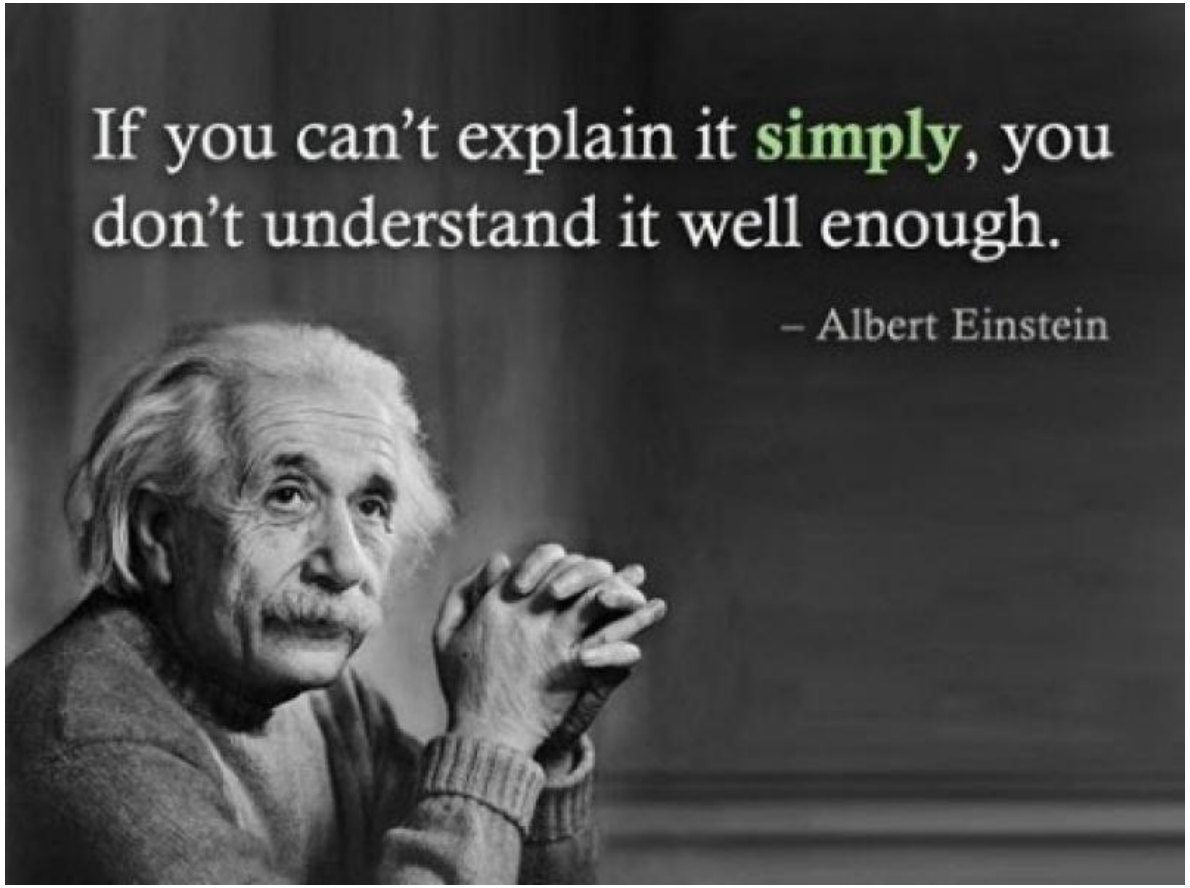
Exception handling



OOP in business

Repetition Data Science

Teach your family, because …



Let’s get it!!