04-if-then-else

September 16, 2022

1 If … then … else/elif … else …

The `if` statement, comes in different "forms and colors", but basically what it does is evaluate an expression and, based on the result, choose which part of the code to execute.

```
[1]: late = True
     if late:
         print('I need to call my manager!')
```

```
I need to call my manager!
```

```
[2]: late = False
     if late:
         print('I need to call my manager!')
     else:
         print('No need to call my manager...')
```

```
No need to call my manager…
```

Several "if's" can ve chained with a final default (`else`) value

```
[3]: income = 15000

     if income < 10000:
         tax_coefficient = 0.0
     elif income < 30000:
         tax_coefficient = 0.2
     elif income < 100000:
         tax_coefficient = 0.35
     else:
         tax_coefficient = 0.45

     print('I will pay:', income * tax_coefficient, 'in taxes')
```

```
I will pay: 3000.0 in taxes
```

Another alternative the use a *ternary operator*

```
[4]: # the 'old way'
     order_total = 247
```

```python
if order_total > 100:
    discount = 25
else:
    discount = 0
print(order_total, discount)

# ternary operator
discount = 25 if order_total > 100 else 0
print(order_total, discount)
```

```
247 25
247 25
```

1.1 Exercises

Go here...

```
[ ]:
```