

S03 T01 Estructura de dades (3)

September 30, 2021

0.1 Exercice 1

```
[2]: m= [{"Gener", "Febrer", "Març"}, {"Abril", "Maig", "Juny"}, {"juliol", "agost", "setembre"}, {"octubre", "novembre", "desembre"}]
print(m)
print(type(m))
```

[['Gener', 'Febrer', 'Març'], ['Abril', 'Maig', 'Juny'], ['juliol', 'agost', 'setembre'], ['octubre', 'novembre', 'desembre']]
<class 'list'>

0.2 Exercice 2

```
[3]: print(m[0][1])
```

Febrer

```
[4]: print(m[0])
```

['Gener', 'Febrer', 'Març']

```
[5]: m2= m[2][2] + " " + m[3][0]
print(m2)
```

setembre octubre

0.3 Exercice 3

```
[6]: n=(2,4,3,7,9,3,4,5,12,1,15)
print(type(n))
```

<class 'tuple'>

How many numbers are there?

```
[7]: print(len(n))
```

11

How many times does number 3 appear?

```
[8]: print(n.count(3))
```

2

How many times do number 3 and 4 appear?

```
[9]: print(n.count(3) + (n.count(4)))
```

4

Which is the highest number?

```
[10]: n_max = max(n)
      print(n_max)
```

15

Which are the three lowest numbers?

```
[11]: n_min= min(n)
      print(n_min)
      n3=sorted(n)
      print(n3)
      print(n3[0:3])
```

1

[1, 2, 3, 3, 4, 4, 5, 7, 9, 12, 15]

[1, 2, 3]

Which is the rang of the list?

```
[17]: rag= n_max-n_min
      print(rag)
```

14

0.4 Exercice 4

Creating of the dictionari

```
[2]: compra = { "Pomes" : {"Qty": 5, "€": 0.42}, "Peres" : {"Qty": 3, "€": 0.66} }
      print(type(compra))
      print(compra)
```

<class 'dict'>

{'Pomes': {'Qty': 5, '€': 0.42}, 'Peres': {'Qty': 3, '€': 0.66}}

Adding oranges

```
[3]: compra["Taronges"] = {'Qty': 4, "€": 0.52}
      print(compra)
```

{'Pomes': {'Qty': 5, '€': 0.42}, 'Peres': {'Qty': 3, '€': 0.66}, 'Taronges': {'Qty': 4, '€': 0.52}}

Cost of pears

```
[12]: peres_cost = compra ['Peres']['Qty'] * compra ["Peres"]["€"]  
      print(peres_cost)
```

1.98

Total number of fruits

```
[13]: total_fruites =sum(x['Qty'] for x in compra.values())  
      print(total_fruites)
```

12

Which is the most expensive fruit?

```
[8]: mes_cara = max(x["€"] for x in compra.values())  
      print(mes_cara)
```

0.66

```
[ ]:
```