

Lab 2

(Prof. Carlos J. Costa)

1) Construct a list (shoppingList) including 'potatoes', 'carrots', 'cod' and 'sprouts'

In [1]: ▶ `#Code here`

2) Get the second and the last element of the list

In [2]: ▶ `#Code here`

3) Iterate through the list in order that the users see the following list of phrases: "We should eat sprouts", "We should eat carrots"...

In [3]: ▶ `#Code here.`

4) Add the following elements to the shoppingList: orange and lime

In [4]: ▶ `#Code here`

5) Remove the carrots, the first element and last element of the shoppingList list

In [5]: ▶ `#Code here`

6) How many fruits are there in the shopping list

In [7]: ▶ `#Code here`

7) Obtain the first 3 elements of the list

In []: ▶ `#Code here`

8) What is the result of

```
shopping = shoppingList
```

```
shoppingListCopy = shoppingList[:]
```

```
print(shopping)
```

Why?

In []: ▶ `#Code here`

9) What is the result of

```
shopping = shoppingList
```

```
shoppingList.append("orange")
```

```
print(shopping)
```

Why?

In []: ▶ `#Code here`

10) remove all the items from the shoppingList

In []: ▶ `#Code here`

11) What is the result of,

```
newPurchases= ("bananas", "beans", "rice")
```

```
print (newPurchases [1])
```

```
newPurchases [0] = "apple"
```

Why?

In []: ▶ `#Code here`

12) Create a dictionary including the following elements: orange, apple, pear, grape and peach. Key are 1 to 5. Iterate through key-value pair.

In []: ▶ `#Code here`

In []: ▶ `#Code here`

13) Create a weekList that is composed of several lists, each one corresponding to a day list. Each day list includes the groceries to buy on this day..

In [9]: ▶ `#Code here`

14) Delete the shoppingList list

In [10]: ▶ `#Code here`

15) Create a list where x is belongs to a list of values from 1 to 100 and you want to generate a new list of y.

$$y = 2x^2 + 2x + 1$$

In []: ▶ `#Code here`