

# **LISTS EXERCISE**

## **TASK 1: ADD ALL DICTIONARY VALUES**

### **WORK WITH**

```
toys = {"robot": "$40.0", "car": "$25", "ironman": "$12"}
```

### **DESIRED OUTPUT**

```
77
```

### **HINTS?**

1. Use the **values()** method.
2. Use **list**
3. Use the built-in Python function, **eval()** to convert a string to a number.
4. Use list slicing with the appropriate index to grab the numbers. Add them together.
5. Use the **int** type.

In [56]:

```
toys = {"robot": "$40.0", "car": "$25", "ironman": "$12"}
```

## **TASK 2: USE COMPARISON OPERATORS IN A LIST**

### **WORK WITH**

```
questions = [10 4, 50 50, 90 10, "c" ("a", "b", "c"), 100 100]  
  
!=  
==  
in
```

### **DESIRED OUTPUT**

[True, True, False, True, False]

### **HINTS?**

1. Use only the three of the operators shown above.

In [151]:

```
questions = [10 4, 50 50, 90 10, "c" ("a", "b", "c"), 100 100]
```

questions

Out[151]:

```
[True, True, False, True, False]
```

### TASK 3: *LEN KEY VALUES WITH COMPARISON OPERATORS*

#### WORK WITH

```
films = {"k1": "blade runner 2049", "k2": "matrix", "k3": "terminator"}  
<  
>  
len()
```

#### DESIRED OUTPUT

True

#### HINTS?

1. Use only the two operators shown above.
2. Use the built-in function, `len()`.
3. Use the operators in the same order as the dictionary keys.

In [95]:

```
films = {"k1": "blade runner 2049", "k2": "matrix", "k3": "ninja scroll"}
```

### TASK 4: *UPDATE DICTIONARY*

#### WORK WITH

```
life_stages = {0: "embryo", 1: "fetus", 2: "baby", 3: "infant", 4: "teen"}  
"
```

#### DESIRED OUTPUT

{0: 'embryo', 1: 'fetus', 2: 'baby', 3: 'infant', 4: 'teen', 5: 'adult', 6: 'big kid!'}

#### HINTS?

1. Create a new dictionary called `midlife`, with keys 5 and 6, and key values "adult" and "big kid!".
2. Add `midlife` dictionary to `life_stages` using one of the dictionary methods.

In [94]:

```
life_stages = {0: "embryo", 1: "fetus", 2: "baby", 3: "infant", 4: "teen"}
```

## TASK 5: ADD ALL VALUES FROM LIST

### WORK WITH

```
nest1 = [(1,2,3), {"k1": [8, 1, 300, 2, 77], "k2": [10,20,30]}, ["a",  
"500", "c"]]  
  
sorted()  
eval()
```

### DESIRED OUTPUT

```
833.0
```

### HINTS?

1. Add 3, 300, 30 and 500 together from each of the nested tuples, dictionaries or lists.
2. Use only the two built-in python functions shown above.
3. Use the Python built-in function, **sorted** for "k1".
4. For the nested dictionary, "k1", index only by -1, not 2.
5. Use the **float**.

In [27]:

```
nest1 = [(1,2,3), {"k1": [30, 1, 300, 2, 77], "k2": [10,20,30]}, ["a", "500",  
"c"]]  
nest1
```

Out[27]:

```
[(1, 2, 3), {'k1': [30, 1, 300, 2, 77], 'k2': [10, 20, 30]}, ['a', '500', 'c']]
```

## TASK 6: ADD ALL LIST VALUES INTO A STRING

### WORK WITH

```
prices = ["a", "b", "9", "c", "d", "FOUR", "e", "f", "2.5"]  
sentence = ""The bill for the {}#!/,?? {}#!/ ??and drink came to {  
}??""
```

### DESIRED OUTPUT

```
prices = ["9", "FOUR", "2.5"]  
  
'The bill for the pizza, chips and drink came to $15.5'
```

### HINTS?

1. Use the **format** function

1. Use the **format** function.
2. Use slicing and stride
3. Also use **eval**, **len** and **str**.
4. Add all the string numbers from the prices list.
5. Use the replace function twice.

In [181]:

```
prices = ["a", "b", "9", "c", "d", "FOUR", "e", "f", "2.5"]  
cash = prices[2::3]
```

In [89]:

```
sentence = """The bill for the {}#!/,?? {}#!/?and drink came to {}??"""
```