

## Worksheet #0

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*Python reviews*  
*tuples*

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1. Write a program that meets the following requirements (a function must be implemented for each feature):

- 1.1. Runs a loop that:

- 1.1.1. Reads average temperatures of the months of the year

**Example for the input (values entered by the user):**

```
What is the temperature in January? 15
What is the temperature in February? 12
What is the temperature in March? 13
What is the temperature in April? 16
What is the temperature in May? 18
What is the temperature in June? 22
What is the temperature in July? 27
What is the temperature in August? 29
What is the temperature in September? 26
What is the temperature in October? 19
What is the temperature in November? 16
What is the temperature in December? 12
```

You can use a list with the months:

```
months = ["January", "February", "March", "April", "May", "June", "July",
"August", "September", "October", "November", "December" ]
```

- 1.1.2. Store temperatures in a list of tuples

**Example, for the input given above:**

```
[('January', 15), ('February', 12), ('March', 13), ('April', 16), ('May',
18), ('June', 22), ('July', 27), ('August', 29), ('September', 26),
('October', 19), ('November', 16), ('December', 12)]
```

- 1.2. Shows a menu that allows the user to obtain:

- 1.2.1. Average annual temperatures

**Example result, for the input above:**

```
= Operations =
1) Annual average
2) Temperatures above the annual average
3) One month temperature
4) Coldest month
5) hottest month
0) EXIT
What is the option? 1
== Annual average: 18.75 ==
```

### 1.2.2. Temperatures above the annual average and the month in which they occurred

**Example result, for the input above:**

```
(...)
What is the option? two
== Temperatures above average ==
-> June: 22
-> July: 27
-> August: 29
-> September: 26
-> October: 19
```

### 1.2.3. The temperature of a given month (the month to search is entered by the user)

**Example result, for the input above:**

```
(...)
What is the option? 3
What month do you want to check? June
== In June the temperature was 22°C ==
```

### 1.2.4. the coldest month

**Example result, for the input above:**

```
(...)
What is the option? 4
== The coldest month was February with 12°C ==
```

### 1.2.5. the hottest month

**Example result, for the input above:**

```
(...)
What is the option? 5
== The hottest month was August with 29°C ==
```

### 1.2.6. EXIT the application

**Result example:**

```
(...)
What is the option? 0
***** END *****
```