PYTHON WORKSHOP

Python Fundamentals

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Workshop Outlines

- Workshop Overview
- Project Demo
- Introduction to Python
- Starting with Colab
- **2**-Comment and Print
- Variables and simple data-types

- String manipulation
- **LE Statements**
- **-Loops**
- Functions
- Lists
- Dictionaries
- Final Project

Functions: create & call

Create Function :

def function_name (arguments)
#statements to be executed
return -999

Calling Function :

X = function_name(arguments)
X

-999

Functions: Special parameters

Arbitrary Arguments, *args

If you do not know how many arguments that will be passed into your function, add a * before the parameter name in the function definition.

This way the function will receive a *tuple* of arguments, and can access the items accordingly:

```
def my_function(*kids):
    print("The youngest child is " + kids[2])

my_function("Emil", "Tobias", "Linus")
```

Functions: Special parameters

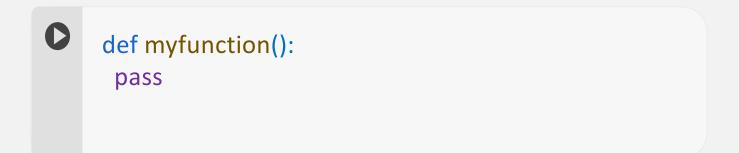
Default Parameter Value

If we call the function without argument, it uses the default value:

```
def my_function(country = "Norway"):
    print("I am from " + country)
    my_function()
    my_function("Brazil")
```

Functions: pass statement

function definitions cannot be empty, but if you for some reason have a function definition with no content, put in the pass statement to avoid getting an error



Exercise 1

- Create a function with name printList and a list parameter
- Iterate through the list and print each element in the list
- Return statement of the function should return the list
- call the function

Start

Exercise 2

- Create a function with name there_exists and a list of strings, and a string variable as parameters and if user forgot to enter a string assume it to be "do nothing"
- Iterate through the list of strings and search for word match with the string variable
- Return true if match is found and false If match was not found
- Call/test the function as the following

there_exists(["what's the time","tell me the time","what time is it","what is the time"],"what is time now")

