PYTHON FUNDAMENTALS

Joris Hoendervangers

Bootcamp

October 2020

AGENDA

- Review yesterday's lab topics

  - Data types

  - Print statements

  - Strings

  - User input

  - Type casting

- Lab Session 2

  - Data structures

    - Lists

    - Tuples

    - Dictionaries

    - Sets

LEARNING OBJECTIVES

During this Bootcamp, you will learn:

Day 1:

- ✓ Variables
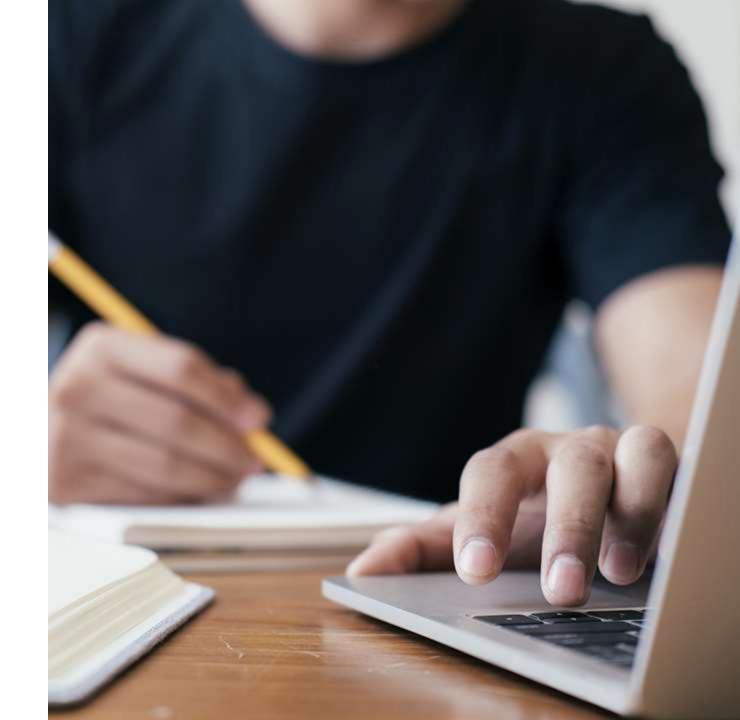- ✓ Datatypes (string, int, float, bool)

Day 2:

- Data structures (lists, tuple, dict, set)

Day 3:

- Flow control
  - If / else statements
  - For loops

Day 4:

- Functions
  - User defined functions
  - Modules
  - Packages

DATA TYPES

```
a = 42                                          # integer
b = 3,14                                         # float
c = "hello world"                                # string
d = [1, 2, 3]                                    # list
e = (1, 2, 3)                                    # tuple
f = {"name": "John", "role": "developer"}    # dict
g = {"a", "b", "c", "d"}                         # set
```

PRINT STATEMENTS

```
first_name = "Joris"
last_name = "Hoendervangers"

print(first_name, last_name, sep="-", end="\n")
```

USER INPUT

```
day = input("which day is it? ")
print("Today is", day)
```

TYPE CASTING

```
#Integer to string
days_per_week = 7
str(days_per_week)

#String to integer
score = "6700"
int(score)
```

STRINGS

```python
pangram = "The five boxing wizaeds jump quickly."
print(pangram[0])
print(pangram.title())
print(pangram.replace("five", "ten"))
```

LAB SESSION 2

Topics:

- Lists
- Tuples
- Mutability
- Dictionaries
- Sets

LEARNING OBJECTIVES

During this Bootcamp, you will learn:

Day 1:

- ✓ Variables
- ✓ Datatypes (string, int, float, bool)
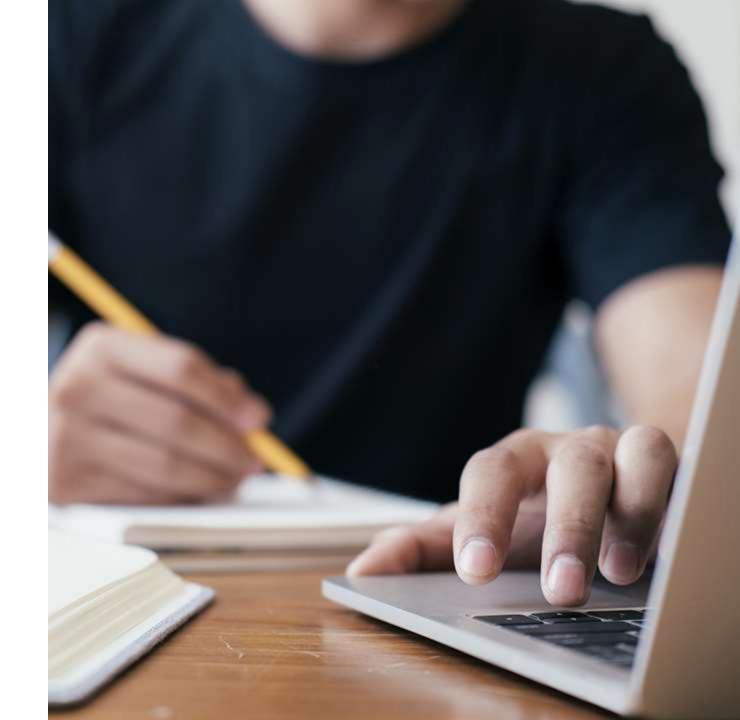
Day 2:

- ✓ Data structures (lists, tuple, dict, set)

Day 3:

- Flow control
  - If / else statements
  - For loops

Day 4:

- Functions
  - User defined functions
  - Modules
  - Packages

THE END

See you tomorrow!