TEI OF CENTRAL MACEDONIA

Python Workshop v1.0

Iordanis Kostelidis, Chair

Topic

- Introduction
  - Presenter
  - Topic of Workshop

- What is Python

- Versions of Python

- Basic Commands of Python

- Bare Minimum Code of Python

- Workshop Code (If We Have Laptops :P)

Introduction, Presenter

- ▶ Iordanis Kostelidis
- ▶ Final Year Student, Informatics & Software Engineer at TEI of Central Macedonia
- ▶ IEEE Chair at Student Branch of TEI of Central Macedonia
- ▶ Junior Software Engineer at DataScouting

Meme of Day #1

▶What… is Python

▶Why… Python

▶How… Python

What is Python

▸ Python is an interpreted, high-level, general-purpose programming language.

▸ Created by Guido van Rossum and first released in 1991, Python's design philosophy emphasizes code readability with its notable use of significant whitespace.

Versions of Python

▶ Python (1.0)   1991

▶ Python 2.0   2000

▶ Python 3.0   2008

Meme of Day #2

Basic Commands of Python

▶aSimpleVar = int(5)

▶otherSimpleVar = str("Hello World")

▶iAmArray = ['A','B','C']

Basic Commands of Python

▶print("Hello World")

▶aVar = input("Give me a param")

▶if x > 5:
   print(">5")

▶for(myIndex in myArray):
   print(myIndex+1)

Bare Minimum Code of Python

```
#!/usr/bin/python

print("IEEE Workshop v1.0")
```

Workshop

```
#!/usr/bin/python

print("IEEE Workshop v1.0")
```

Workshop

```python
#!/usr/bin/python

print("IEEE Workshop v1.0")
print("What's your name?")

name = input("My name is ")

print("Hello", name)
```

Workshop Code

```python
#!/usr/bin/python

print("IEEE Workshop v1.0")
print("What's your name?")

name = input("My name is ")

print("Hello", name)

print("You want to calculate your passed and non-passed lessons?")

positiveAnswers = ['yes', 'y', 'yep']
negativeAnswers = ['no', 'n', 'nop']

answer = input()

if answer not in negativeAnswers and answer not in positiveAnswers:
    print("I don't understand, please run my again. Bye")
    quit()

if answer in negativeAnswers:
    print("OK, good bye...")
    quit()

print("TODO")
```

Workshop Code

```python
if answer in negativeAnswers:
    print("OK, good bye...")
    quit()

print("OK, how many lessons you want to give me?")
lessons = int(input())

print("OK, i will remember it")

lessonRanks = []

for lessonIndex in range(lessons):
    print("Give me the rank for the lesson number " + str(lessonIndex + 1))
    lessonRanks.append(input())

for lessonIndex in range(lessons):
    print("Lesson No", lessonIndex + 1, "have rank =", lessonRanks[lessonIndex])
```

Workshop Code

```python
passedLessons = []
nonPassedLessons = []

for lessonRank in lessonRanks:
    if int(lessonRank) >= 5:
        passedLessons.append(lessonRank)
        continue

    nonPassedLessons.append(lessonRank)

passedLessonsCount = len(passedLessons)
nonPassedLessonsCount = len(nonPassedLessons)

print("From", lessons, "lessons, you have passed", passedLessonsCount, "lessons and you have non-passed",
    nonPassedLessonsCount, " lessons")
print("That's it, bye :D")
```

Workshop Code [BONUS]

TableNumberAvg.py

```python
def table_number_avg(table):
    if len(table) == 0:
        return 0

    sum_of_table = 0

    for number in table:
        sum_of_table = sum_of_table + int(number)

    return sum_of_table / len(table)
```

```python
#!/usr/bin/python
from TableNumberAvg import table_number_avg


print("IEEE Workshop v1.0")
```

```python
passedLessonsCount = len(passedLessons)
nonPassedLessonsCount = len(nonPassedLessons)
passedLessonsAvg = table_number_avg(passedLessons)
nonPassedLessonsAvg = table_number_avg(nonPassedLessons)

print("From", lessons, "lessons, you have passed", passedLessonsCount, "lessons and you have non-passed",
      nonPassedLessonsCount, " lessons")
print("Your passed avg are", passedLessonsAvg, "and non-passed avg are", nonPassedLessonsAvg)
print("That's it, bye :D")
```
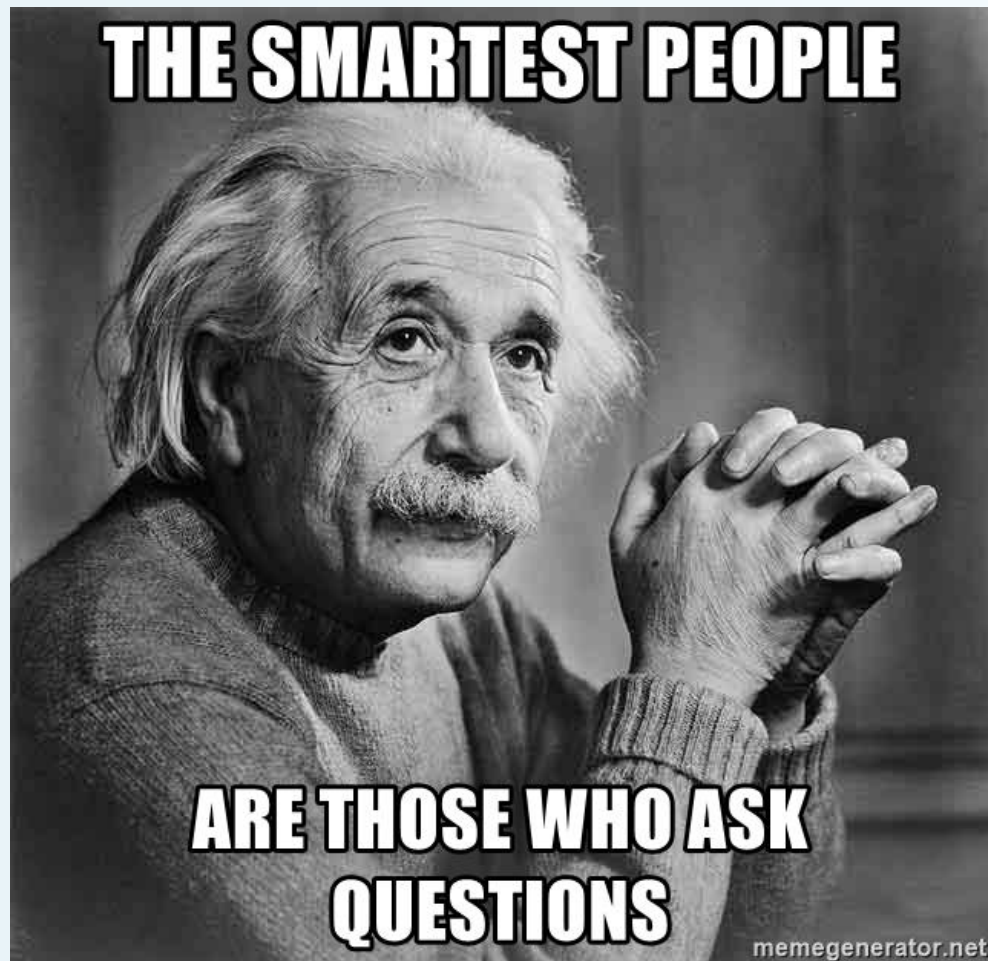
Contact

▸ IEEE Student Branch
- Website: http://ieee.teicm.gr/
- eMail: ieeesbteicm@gmail.com

▸ Iordanis Kostelidis
- Website: https://iordaniskostelidis.github.io/
- eMail: Kostelidis@IEEE.org

Presentation and Code

▶GitHub Profile: https://github.com/IordanisKostelidis

▶Repository: IEEE-Python-Workshop-v1.0

THE SMARTEST PEOPLE ARE THOSE WHO ASK QUESTIONS

memegenerator.net

Python Workshop v1.1

▸ Αρχές Οκτωβρίου 2019

▸ 2 ώρες

▸ JetBrains PyCharm CE

▸ Περισσότερες εντολές, δομές δεδομένων και φυσικά **Debugger**

DEBUGGING

I DON'T KNOW WHERE YOU ARE, I DON'T KNOW HOW YOU WORK, BUT I WILL FIND YOU, AND

I WILL FIX YOU

Python Workshop v2.0 (IEEEXtreme Edition)

Meme of Day #5

▶ Μετά το v1.1

▶ Θα λύσουμε θέμα απο τον
διαγωνισμό IEEEXtreme 12.0

▶ Προετοιμασία για τον IEEEXtreme 13.0

THE TWO STATES OF EVERY PROGRAMMER

I AM A GOD.

I HAVE NO IDEA WHAT I'M DOING.

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