Python Data Processing 1

By Sendi Novianto

Sendi Novianto

Detail Information:

- S1 – Dian Nuswantoro
- S2 – ITS
- S3 – SCUT (South China University of Technology)
- Dosen Aktif Universitas Dian Nuswantoro
- **Bidang Penelitian**:
  - Game Technology
  - Artificial Intelligent
  - Image Processing
  - Pattern Recognition
  - IOT

Admin : Galang Rambu Anarki S.Kom

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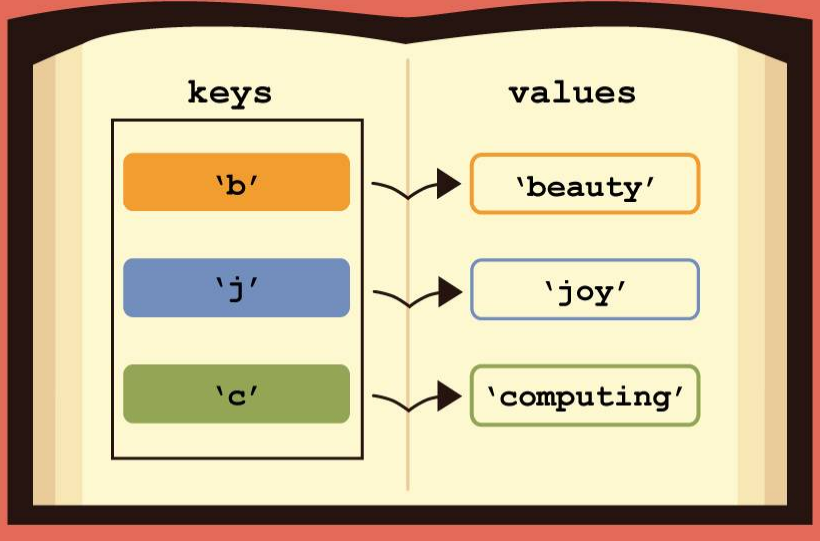
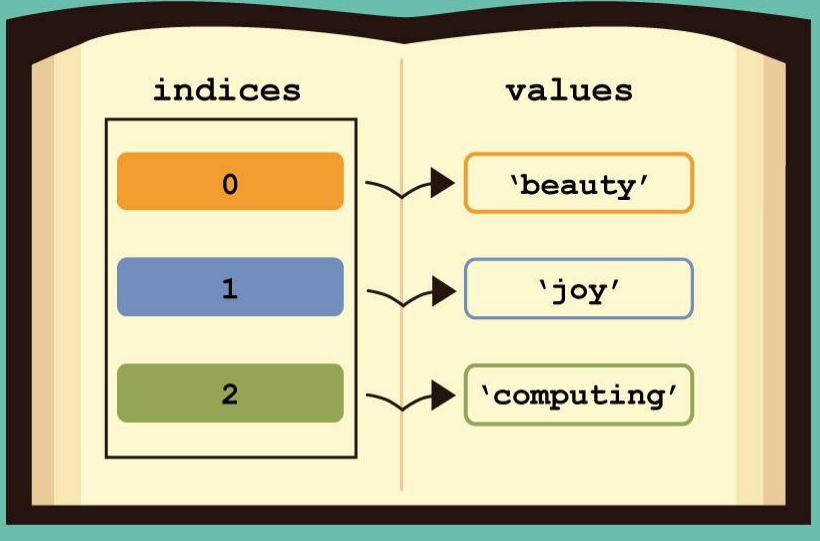
01

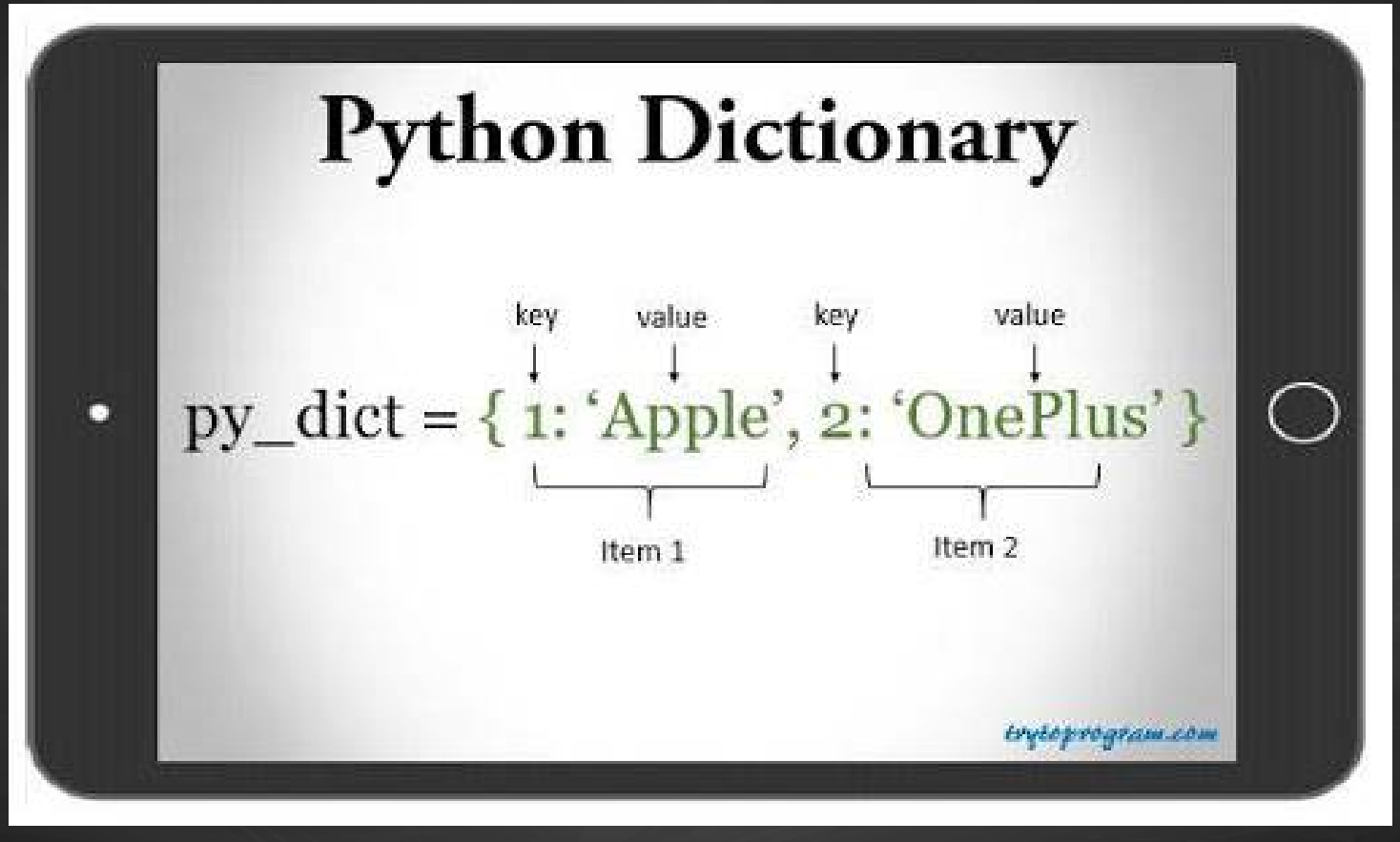
Dictionary

dictionaries



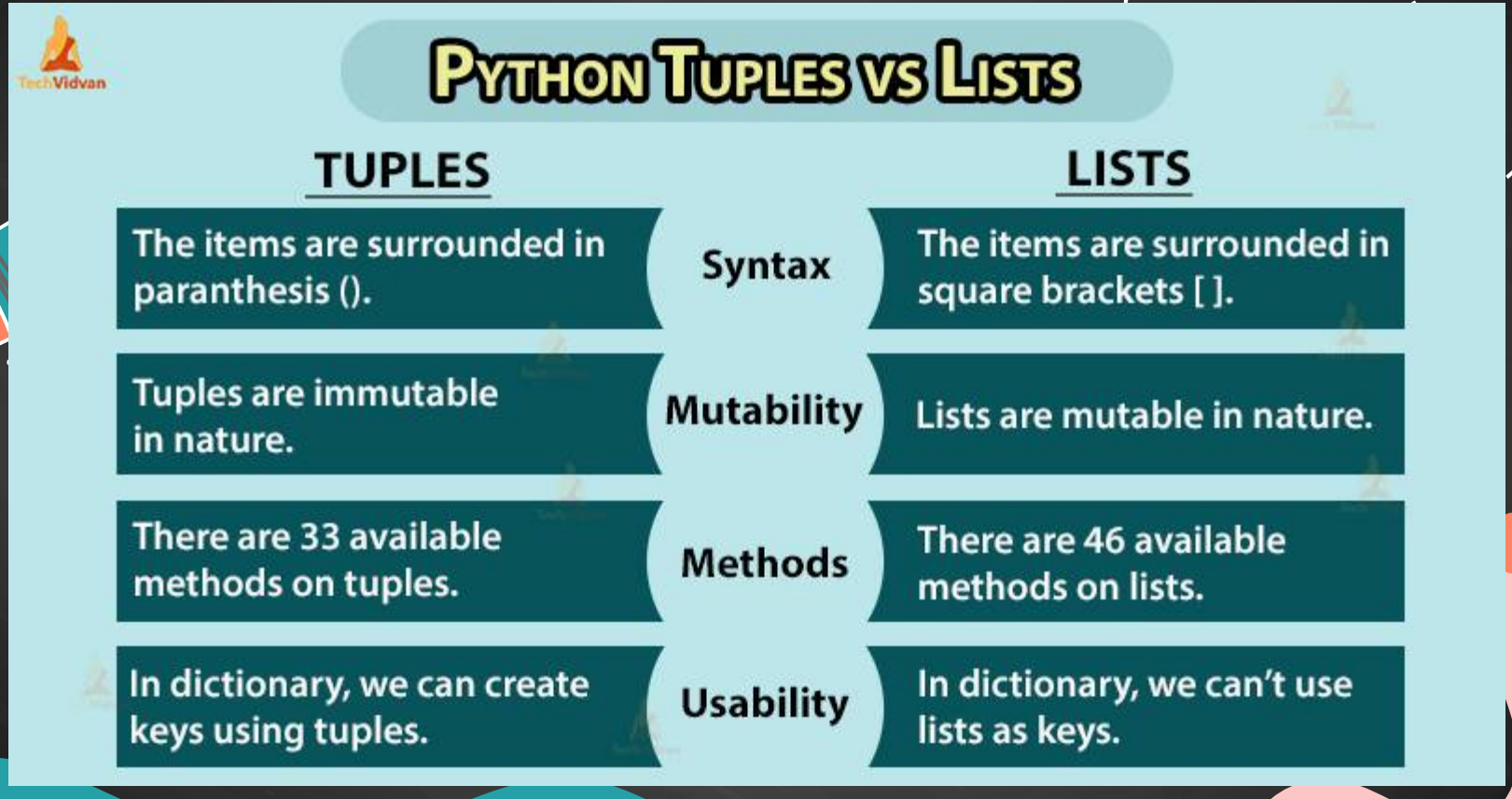
lists




Python Dictionary
key
value
key
value
py_dict = { 1: 'Apple', 2: 'OnePlus' }
Item 1
Item 2
tutorialprogram.com

02

Tuple


TechVidvan
PYTHON TUPLES VS LISTS
TUPLES
LISTS
The items are surrounded in paranthesis ().
Syntax
The items are surrounded in square brackets [ ].
Tuples are immutable in nature.
Mutability
Lists are mutable in nature.
There are 33 available methods on tuples.
Methods
There are 46 available methods on lists.
In dictionary, we can create keys using tuples.
Usability
In dictionary, we can't use lists as keys.

03

Set

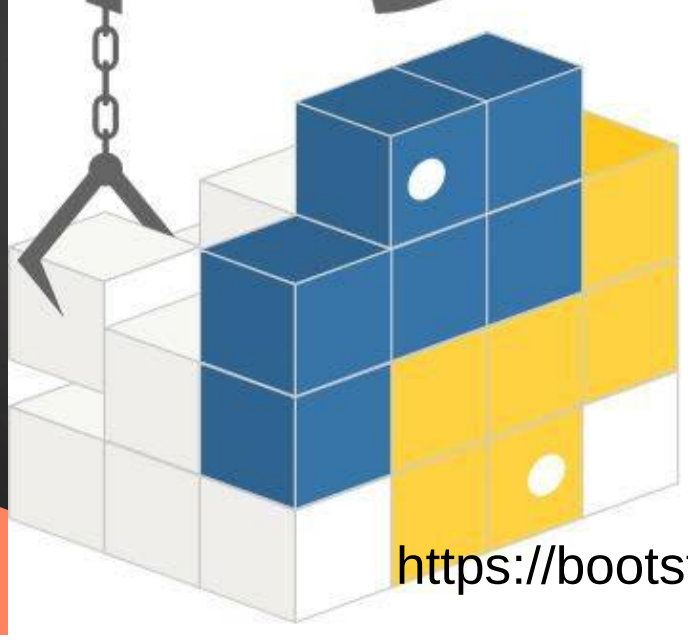
List Vs Set Vs Dictionary Vs Tuple

Lists	Sets	Dictionaries	Tuples
List = [10, 12, 15]	Set = {1, 23, 34} Print(set) -> {1, 23,24} Set = {1, 1} print(set) -> {1}	Dict = {"Ram": 26, "mary": 24}	Words = ("spam", "egss") Or Words = "spam", "eggs"
Access: print(list[0])	Print(set). Set elements can't be indexed.	print(dict["ram"])	Print(words[0])
Can contains duplicate elements	Can't contain duplicate elements. Faster compared to Lists	Can't contain duplicate keys, but can contain duplicate values	Can contains duplicate elements. Faster compared to Lists
List[0] = 100	set.add(7)	Dict["Ram"] = 27	Words[0] = "care" ->TypeError
Mutable	Mutable	Mutable	Immutable - Values can't be changed once assigned
List = []	Set = set()	Dict = {}	Words = ()
Slicing can be done print(list[1:2]) -> [12]	Slicing: Not done.	Slicing: Not done	Slicing can also be done on tuples
Usage: Use lists if you have a collection of data that doesn't need random access. Use lists when you need a simple, iterable collection that is modified frequently.	Usage: - Membership testing and the elimination of duplicate entries. - when you need uniqueness for the elements.	Usage: - When you need a logical association b/w key:value pair. - when you need fast lookup for your data, based on a custom key. - when your data is being constantly modified.	Usage: Use tuples when your data cannot change. A tuple is used in combination with a dictionary, for example, a tuple might represent a key, because its immutable.

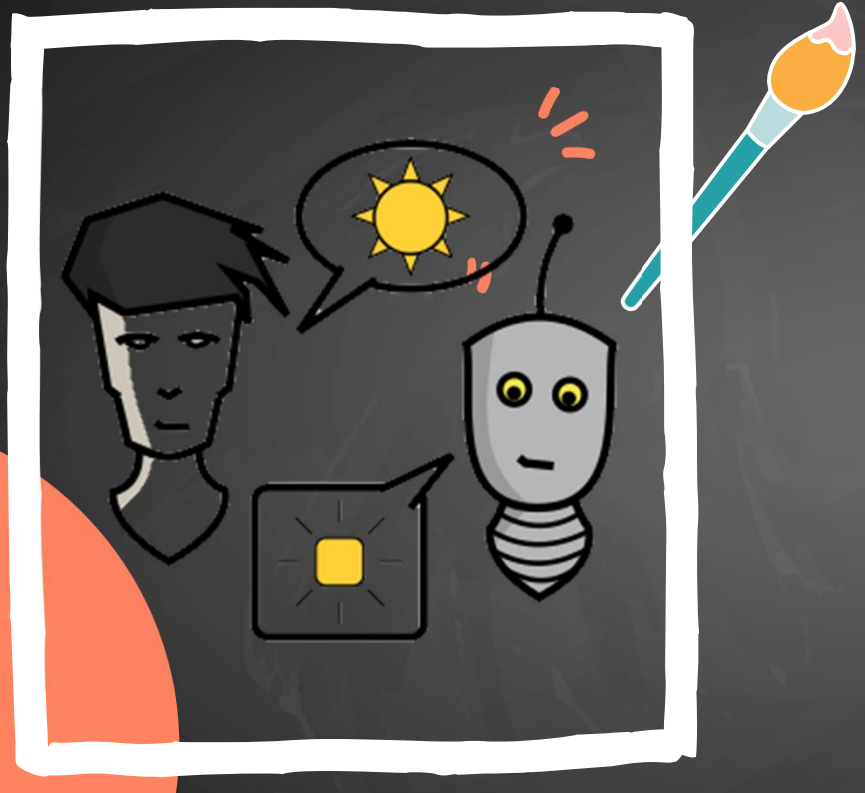
04

Pip

python™ Package Index



https://bootstrap.pypa.io/get-pip.py



05

Modules

Data Flair

Python Modules

01 Creating a Module

02 Importing Modules

03 More on Modules and Importing

04 Executing Modules as Scripts

05 The Module Search Path

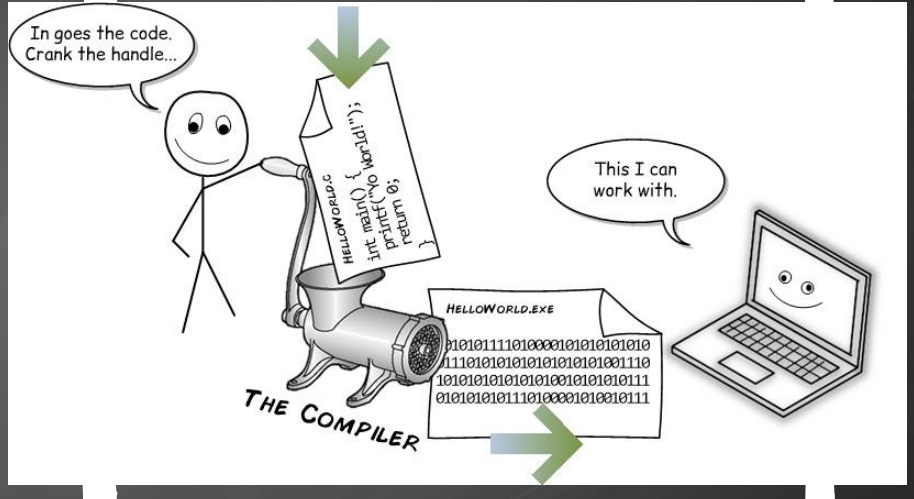
06 Compiled Python Files

07 Standard Modules

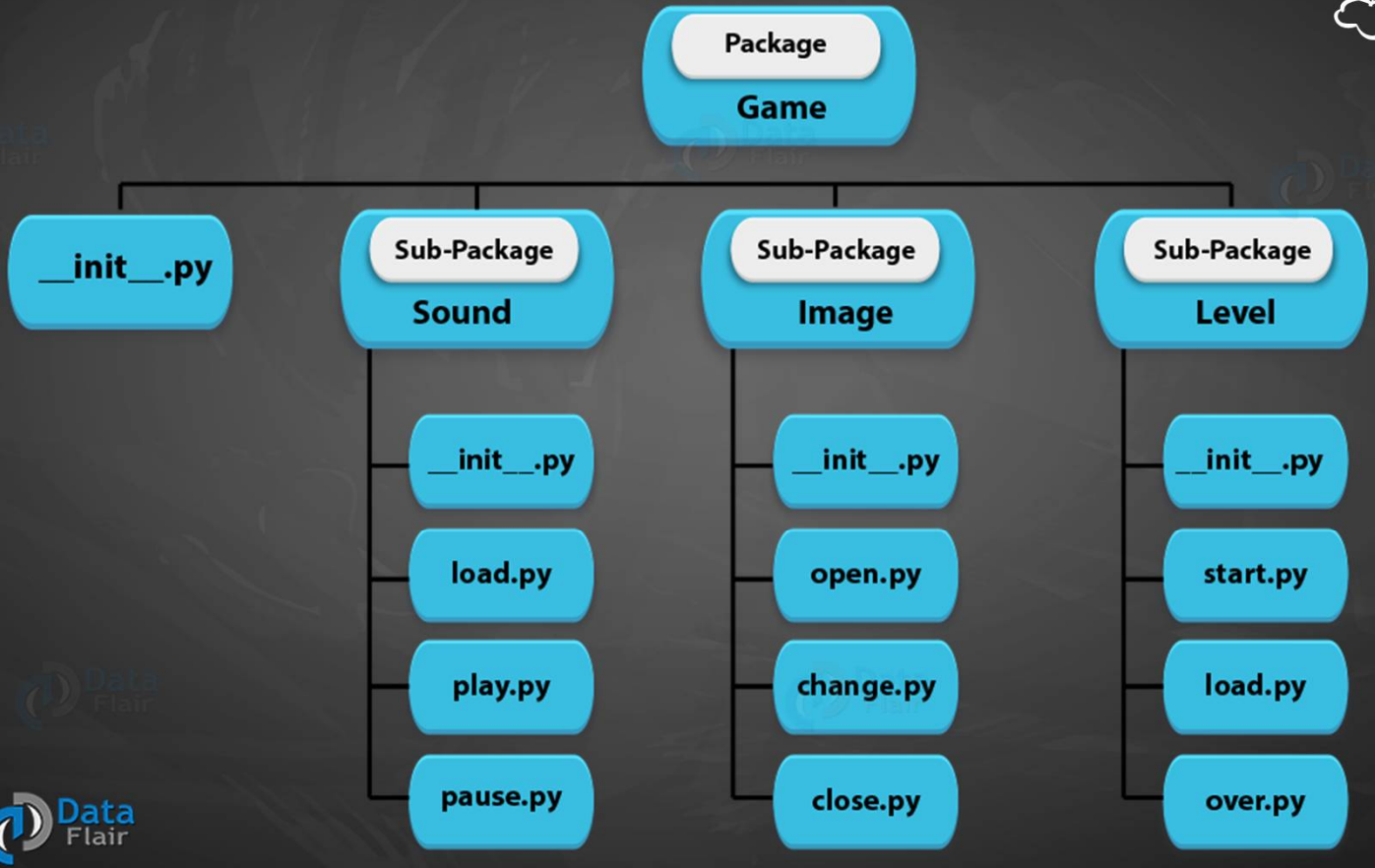
08 The dir() Function

06

Package


In goes the code.
Crank the handle...
HELLOWORLD.C
int main() { printf("Yo World!"); return 0; }
This I can work with.
HELLOWORLD.EXE
THE COMPILER

Package Module Structure



Tugas

Buatlah modules dengan nama bangunruang.py yang berisikan mengenai fungsi-fungsi untuk menghitung luas , keliling, dan volume dari

1. Kubus
2. Balok
3. Bola

lalu gunakan module tersebut untuk dipakai fungsi2nya dalam setiap bangun ruangnya.

Contact

Sendi Novianto

Bidang minat utama : game technology, Artificial Intelligence, Image Processing, Pattern Recognition, IOT

Bidang minat sekunder : Computer Graphics, Operating System, Database, Web Programing

Email : sendi.novianto@dsn.dinus.ac.id

No. HP / Whatsapp : 0813 9010 5422

Thank You!