Hello World! In python

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Agenda

- Why python
- Python features
- Data types
- Variables
- Strings
- Data structure
- Loops
- functions
- Modules
- First Code!



Why python

- Easy to learn
- Fast
- Big task with less effort
- Simple
- Elegant



Python features

- Interpreted
- Object oriented, functional
- Portable
- Scalable: doing complex task rather than shell script, eg: searching in regex in file system
- Database: APIs for all database engines



Data types

- Numbers
- String
- List
- Tuple
- Dictionary

Variables

- weak data type
- Naming convention is important!
- name = 'Aya', x = 'Aya' not the same meaning!

String

- name = 'Python'
- Has methods:
 - name.lower(), name.upper()
 - name.find('o')
 - name.replace('o', 't')



String

String

- name = 'Hello'
- name[1:] => ello
- name[:-1] => Hell
- name[2:4] => II



Data structure

- List []: similar to arrays
- Set {}: no duplicate
- Dict {key:value}: key-value
- Tuple (): for static data



Loops

For

for(i in range(10)):

Print i

While

while(True):

Print 'I love python!'



Functions

>> def print_info():

while(True):

Print 'i love python!'

>> print_info()

Modules

- Need lib. then import it
- Examples: os module, sys module
- No one script holds all things
- Two ways:
 - import os
 - From os import dir

