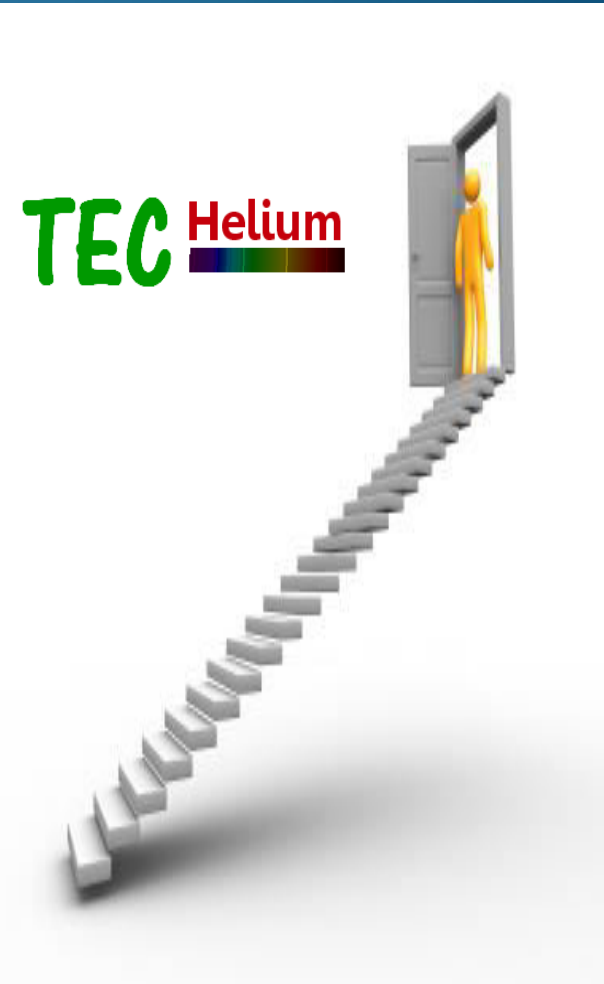


Lets Face it, now

# Project Oriented Python

Modules /Packages  
&  
Programs



# Python Modules

- Allows to logically organize Python code.
- Grouping related code into a module makes the code easier to understand and use.
- In Simple, a module is a file consisting of Python code.
- A module can define functions, classes and variables.

# The *import* Statement

- Use to source Python code as module
- Syntax
  - `import module1[, module2[,... moduleN]`
- Modules must be present in the search path.
- Example

dev.py

```
def open_device (IP_address) :  
    print "login in ", IP_address  
    login(IP_address)  
    retrun
```

myfile.py

```
#!/usr/bin/python  
  
# Import module dev  
import dev  
  
# Call defined function that module has  
dev.open_device(IP_address)
```

# The from ... *import* Statement

- Use to import specific attribute from module into current namespace
- Syntax
  - `from module import name1[, name2[,... nameN]`
- Modules must be present in the search path.
- Example

dev.py

```
def open_device (IP_address) :  
    print "login in ", IP_address  
    login(IP_address)  
    retrun
```

myfile.py

```
#!/usr/bin/python  
  
# from module dev Import open_device  
from dev import open_device  
  
# Call defined function that module has  
open_device(IP_address)
```

# Locating modules

- Current directory
- If not found, Python then searches each directory in the shell variable PYTHONPATH.
- If not found, Python checks the default path.
- On UNIX, this default path is normally /usr/local/lib/python/.
- set PYTHONPATH=c:\python20\lib; In windows
- set PYTHONPATH=/usr/local/lib/python

# Packages in Python

- A group of modules can be clubbed together as packages
- This helps not to load each module separately
- Example:
  - Create a module directory
    - Lets say mymodules
  - Under that directories create modules
    - Lets say afunction.py and bfunction.py with different functions
  - Create `__init__.py` under mymodules directory
  - Import all modules in it.
  - Now you can write a program and import mymodules

# Packages

- Lets check the example in IDLE

Thanks