SENG 265-Lab06

szehtabi@uvic.ca

Exercize

-Write your own 'diff' command!

Functions

1. Define function name and arguments:
2. A doc string
   - explains what the function does
3. Body of the function
   - expressions that execute some code on arguments and local variables
4. Return
   - Every function returns a value! Default is None if no explicit return value is specified.

Function example

```
def my_add (arg1, arg2):
    """This is a function that adds integers"""
    sum = arg1 + arg2
    return sum

if __name__=='__main__':
    print my_add(2,3)
    #prints 5
```

__name__

- A variable set by python interpreter
- It is different for the main program and imported modules
- It allows us to both execute modules and import them as libraries
- How to use:
  - if __name__ == '__main__':

    main()

File

- open(filename, mode)
  - mode: r, r+, w, a, ...
- f.read()
  - returns the entire file as a string
- f.readline()
  - returns one line as a string
- f.readlines()
  - returns all the lines as a list of srings
- for line in f:

  #Do something with line
- f.write(str)

Strings

- split: string to list:
  - ″ab;cd;ef″.split(″;″) # returns ["ab","cd","ef"]
- join: list to string:
  - ″;″.join([″ab″, ″cd", "ef″]) #returns "ab;cd;ef"
- str(): converts anything to string
- String formating using % operator:
  - ″Today is %s the %dth″ %('February',14)
  - #returns 'Today is February 14th'
- str.upper()
  - ″hello″.upper() #returns ″HELLO″

Exercize

-Write your own 'diff' command!