PYTHON: FROM PROGRAMMER TO TAMER

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HOW I MET PYTHON
It was nice to play football.
BUT RAIN HAPPENS!
GIMME MORE FOOTBALL!
COMMODORE 64K
THE PERSONAL COMPUTER WITH PROFESSIONAL POWER!

NEW FROM COMMODORE
Advanced Color Graphics
Professional Sound and Music
64K Memory Plus CP/M Option
for your Business, Education
and Personal use

64K memory
SOMETHING WENT WRONG WITH SANTA...
LET THE CHILDREN PLAY
(OTHERWISE BAD THINGS HAPPEN!)
BLUE SCREEN OF DEATH...

...ALL THE TIME!
READY TO BECOME A NERD
LET'S GIVE SOFTWARE ANOTHER CHANCE

TRUE STORY :(
“It was nice to learn Python; a nice afternoon”
(D. Knuth, Trento, 2012)
READY TO GOOOOO!
the end

OR NOT?
QUESTION TIME
IT'S A HARD LIFE
ONLY THE STRONGEST WILL SURVIVE
RTFM!

BUT...
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KAIZEN

DAILY HOMEWORK
http://planet.python.org/
http://twitter.com
http://plus.google.com
...

DON'T BE AFRAID OF ASKING HELP
Any pythonista around
Mailing list
IRC
http://stackoverflow.com
http://www.python.org/community

YOU ARE HERE, AND THIS IS NICE!
YOUR FRIEND PDB

GET IN TOUCH WITH YOUR GEARS
A nice writeup to start playing with PDB: http://pymotw.com/2/pdb/

Search for PDB in PyPI: https://pypi.python.org/pypi?%3Aaction=search&term=pdb+debugger&submit=search

Search debugging tools for your app on PyPI!
NO MORE PRINT

BIG BROTHER IS WATCHING YOU
Logging is an important part of your code!
Exceptions

Exceptions are an important part of your code!
HOW GOOD IS YOUR CODE?

```
class MyClass:
    """A simple example class""

    def f(self):
        return 'hello world'
```

https://pypi.python.org/pypi/pep8
https://pypi.python.org/pypi/pyflakes
https://pypi.python.org/pypi/PyChecker
https://pypi.python.org/pypi/pylint
USE PYPI - THE CHEESESHOP

https://pypi.python.org/pypi
https://testpypi.python.org/pypi
Forget backup copies

- bazaar (bzr)
- git (git)
- mercurial (hg)
- subversion (svn)
YOU CAN CHOOSE YOUR PLACE

- http://bitbucket.org (git, hg)
- http://code.google.com (git, hg, svn)
- http://github.org (git, svn)
- http://launchpad.net (bzr)

NO WARRANTY ABOUT QUALITY OF LIFE...
PINK FLOYD
WEDNESDAY 30th MARCH 1977
at 7.30 pm Doors open 6.45 pm
Tickets £3.50 inc. VAT
New Bingley Hall, Stafford
No re-admission for conditions see reverse to be retained and produced on demand.

CITY HALL, HULL, THURSDAY, 7th JANUARY, 1971
at 8 p.m.
BLACK SABBATH IN CONCERT

NUMBER D17 PRICE 15/-

ODEON THEATRE
KENNEDY STREET ENTERPRISES present URIAH HEEP in Concert
EVENING 7.30 p.m.
THURSDAY NOVEMBER 24
FRONT STALLS £2.50

Harvey Goldsmith by arrangement with Sun Artistes present
In Concert on THURSDAY 3rd NOVEMBER 1977 at 7.30p.m
plus Special Guest DONOVAN
New Bingley Hall Stafford

TICKETS £3.50 including V.A.T.
No re-admission

1. PINK FLOYD concert ticket:
   - Date: Wednesday, 30th March 1977
   - Location: New Bingley Hall, Stafford
   - Ticket price: £3.50 including VAT
   - No re-admission for conditions

2. BLACK SABBATH concert ticket:
   - Date: Thursday, 7th January 1971
   - Location: City Hall, Hull
   - Ticket price: 15/-

3. URIAH HEEP concert ticket:
   - Date: Thursday, 24th November 1977
   - Location: Odeon Theatre, Birmingham
   - Ticket price: £2.50
   - No ticket exchanged nor money refunded

4. DONOVAN concert ticket:
   - Date: Thursday, 3rd November 1977
   - Location: New Bingley Hall, Stafford
   - Ticket price: £3.50 including VAT
   - No re-admission
A QUITE COMPREHENSIVE LIST

A TICKET AGGREGATOR
https://pypi.python.org/pypi/bugwarrior
Tests

System12 Test Program
Loaded Software: TET2/VER.C

DISPLAY TEST
SWITCH TEST
SOUND TEST
JVS CABINET OPTIONS
GAME OPTIONS
COIN OPTIONS
A.D.S.
DATA CLEAR
EXIT & SAVE
BE AGILE!

To Do
- Use Kanban
- Subscribe to KanbanTool

In Progress
- Learn About Kanban

Done
- Get Some Sticky Notes
SCALABILITY

WILL YOUR APPLICATION HANDLE...

... MORE DATA?
... MORE USERS?
... MORE REQUEST?
FAIL FAST!
THE TIMES I WAS BITTEN BY PYTHON!
NERD WARS

- Use the **Source**, Luke
- The **Source** will be with you, always
- The **Source** is strong with this one
- May the **Source** be with you

https://pypi.python.org/pypi/pypi/jedi
**SOME RANDOM TIPS**

**Use builtins!**
- all, any, filter, map, sum, zip, ...
  - [http://docs.python.org/3/library/functions.html](http://docs.python.org/3/library/functions.html)

**Code like a Pythonista!**

**Context managers!**
- [http://www.python.org/dev/peps/pep-0343/](http://www.python.org/dev/peps/pep-0343/)
[ale@padme presentations]$python3
>>> [x for x in range(10)]
[0, 1, 2, 3, 4, 5, 6, 7, 8, 9]
>>> (x for x in range(10))
<generator object <genexpr> at 0xb7187234>
>>> {x for x in range(10)}
{0, 1, 2, 3, 4, 5, 6, 7, 8, 9}
>>> {x:x for x in range(10)}
{0: 0, 1: 1, 2: 2, 3: 3, 4: 4, ..., 9: 9}
from logging import getLogger
logger = getLogger('Test logger')

def abs_ratio(x, y):
    try:
        return abs(x / y)
    except:
        logger.exception('Error abs_ratio: %r, %r' % (x, y))
    return -1

abs_ratio(1, None)
abs_ratio(1, 0)
Error abs_ratio: 1, None
Traceback (most recent call last):
  File "logexample.py", line 6, in abs_ratio
    return abs(x / y)
TypeError: unsupported operand type(s) for /: 'int' and 'NoneType'
Error abs_ratio: 1, 0
Traceback (most recent call last):
  File "logexample.py", line 6, in abs_ratio
    return abs(x / y)
ZeroDivisionError: division by zero

http://pymotw.com/2/logging/
http://pymotw.com/2/exceptions/