Introduction to Python

Debugging Python Programs

4th November 2016

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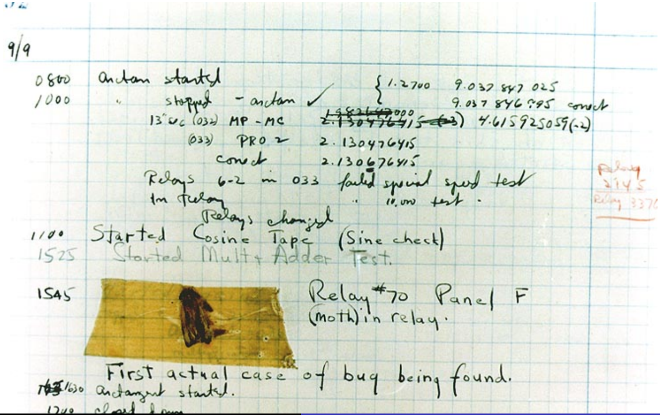

9/9

0800 Antan started

1000 " stopped - antan ✓ {1.2700 9.037 847 025

9.037 846 995 conct

13" uc (032) MP - MC ~~1.982147000~~ ~~2.130476415~~ (-3) 4.615925059(-2)

(033) PRO 2 2.130476415

conct 2.130676415

Relays 6-2 in 033 failed special speed test

In relay " 11.000 test.

Relays changed

1100 Started Cosine Tape (Sine check)

1525 Started Mult+ Adder Test.

1545 Relay #70 Panel F

(moth) in relay.

First actual case of bug being found.

~~1600~~ 1630 Antangent started.

[illegible]

Relay 2145
Relay 3370

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- An **error** is behaviour in a program we don't want.
- The aim of debugging is to **diagnose** the bug that causes the error.

The Devil's Guide To Debugging

Stolen from Steve McConnell's Code Complete

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- Take your time - debugging can take more time than coding!
- Set up test cases that you can work out by hand - or at least estimate.

pdb

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import pdb
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- Some commands:
  1. h(elp) - print list of commands (USE THIS!)
  2. b(reak) [linenum]- set breakpoint here or at linenum
  3. cl(ear) [linenum] - delete breakpoint here or at linenum
  4. s(tep) - step into function called in this line
  5. c(ontinue) - execute until breakpoint
  6. p [exp] - print expression e.g. a variable

Demo

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Demo Time!