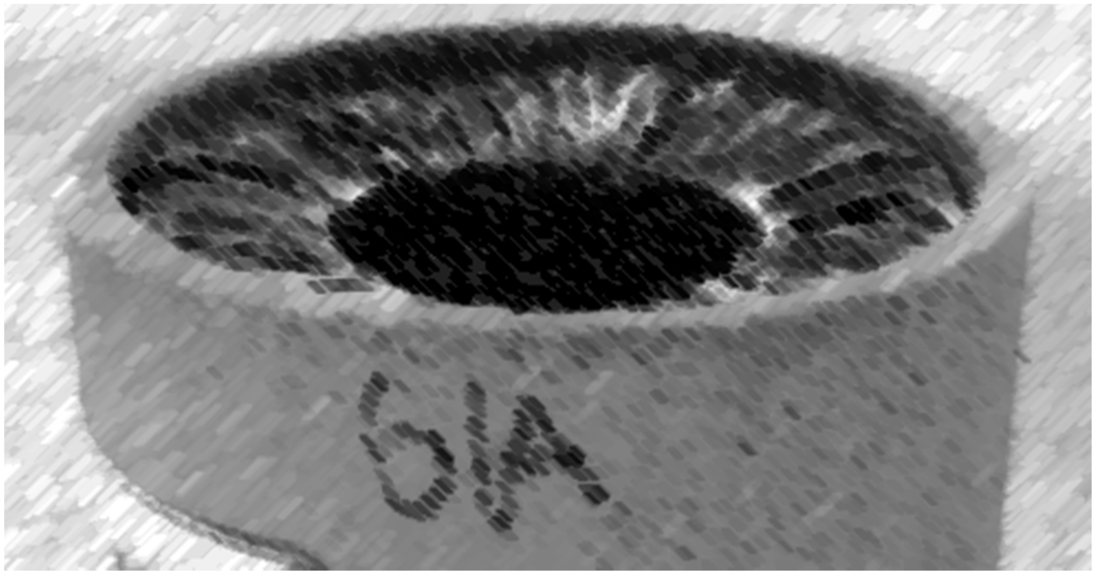

CS61A Lecture 32

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UC Berkeley

April 5, 2013

Announcements

- Hog revisions due Monday
- HW10 due Wednesday
- Make sure to fill out survey on Piazza
  - We need to schedule alternate final exam times for those who have a conflict, so if you do, let us know on the survey when you are available

The Begin Special Form

Begin expressions allow sequencing

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(define (repeat k fn)
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$$\texttt{(begin <exp}_1\texttt{> <exp}_2\texttt{> ... <exp}_n\texttt{>)}$$

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(define (repeat k fn)
  (if (> k 0)
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(begin <exp1> <exp2> ... <expn>)
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(define (repeat k fn)
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$$(\texttt{begin } \langle exp_1\rangle\ \langle exp_2\rangle\ \ldots\ \langle exp_n\rangle)$$

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(define (tri fn)
  (repeat 3 (lambda () (fn) (lt 120))))
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(define (leg d k)
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(define (leg d k)
  (sier (/ d 2) (- k 1)) (penup) (fd d) (pendown))
```

Handling Errors (Back to Python)

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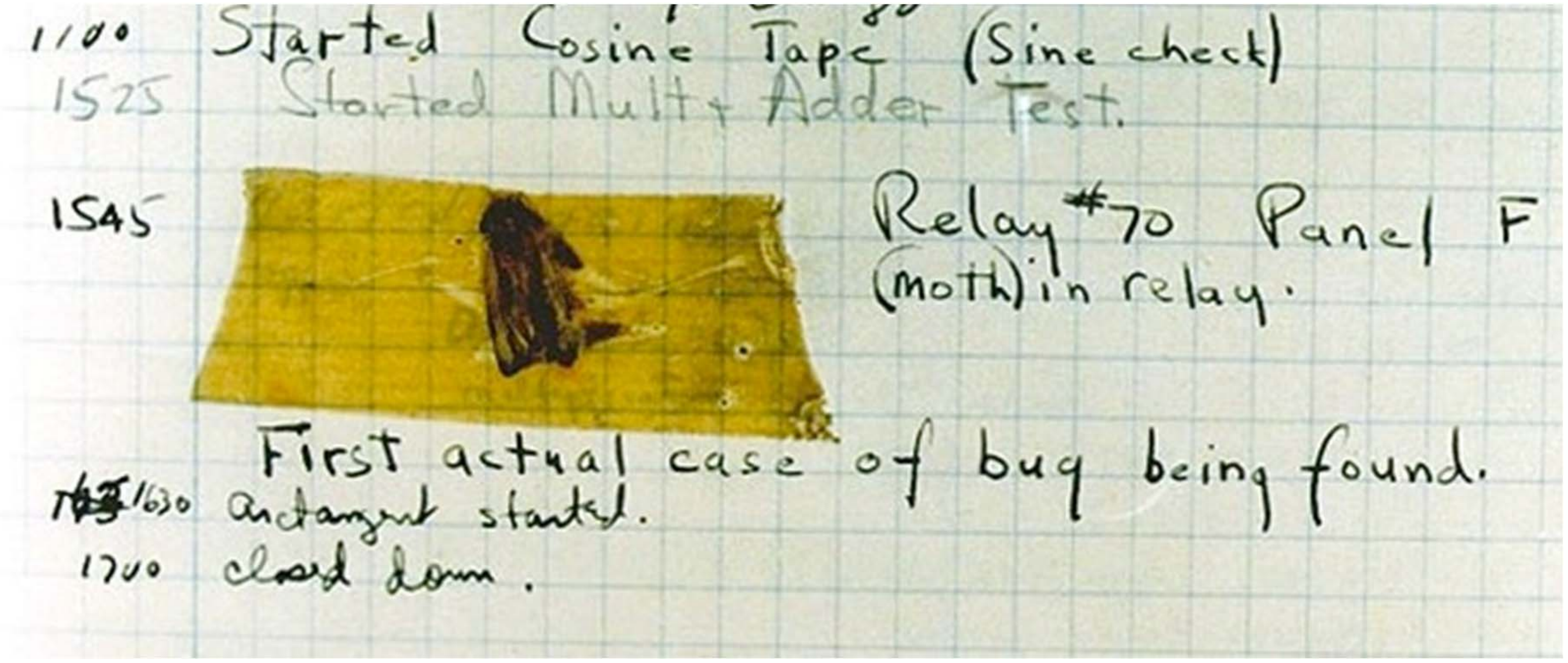

1100 Started Cosine Tape (Sine check)

1525 Started Mult + Adder Test.

1545 Relay #70 Panel F (moth) in relay.

First actual case of bug being found.

1630 Antangent started.

1700 closed down.

September 9 1947: Moth found in a Mark II Computer

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If **`f`** calls **g** and **g** calls **h**, exceptions can shift control from **h** to **`f`** without waiting for **g** to return

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If **f** calls **g** and **g** calls **h**, exceptions can shift control from **h** to **f** without waiting for **g** to return

However, exception handling tends to be slow

Assert Statements

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Whether assertions are enabled is governed by the built-in bool **`__debug__`**

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`NameError` -- A name wasn't found

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`RuntimeError` -- Catch-all for troubles during interpretation

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- If the class of the exception inherits from **<exception class>**, then
- The **<except suite>** is executed, with **<name>** bound to the exception

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Multiple try statements: Control jumps to the except suite of the most recent try statement that handles that type of exception.

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def invert(x):
    result = 1/x  # Raises a ZeroDivisionError if x is 0
    print('Never printed if x is 0')
    return result

def invert_safe(x):
    try:
        return invert(x)
    except ZeroDivisionError as e:
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