CSC104 fall 2012
Why and how of computing
week 8

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Text: Picturing Programs
Outline

operators and operating systems

Notes
Machines began to take over setting the program counter to a new job, collecting the output, fetching memory... but it was still one job at a time.
time sharing, version 0.1
one user, one program, one computer
Does one task stop, or only appear to stop, for the other?
unix (mostly) to the desktop
GUIs, time-sharing, networking, flame-wars
an operating system should have

- kernel (shell, shielded access to hardware, referee sharing)

- utilities
a blast from the past
really bad text encryption

Encrypt “STRING”
What is given, what’s required?

Redo the last step for a single character

What is a really simple rule (or set of rules) for (rot13 c), where c is some character?

It might help to know that characters `\A` through `\Z` have ascii encodings 65 through 90.
more rot13

- What about characters that aren’t in \#A through \#Z?

- What about lower-case characters?

- How do we get from characters to strings of characters?
reversing strings

Give step-by-step instructions to reverse “string”

► given/required?

► check-expect some small examples?

► try to write down a recipe
How do you recognize a palindrome, such as “rotor” or “ACTAGATCA”?

- given/required?
- check-expect a small example or two
- try to state the recipe