

CSCI 331: Introduction to Computer Security

Lecture 19: Locks

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Topics

Physical security
Locks



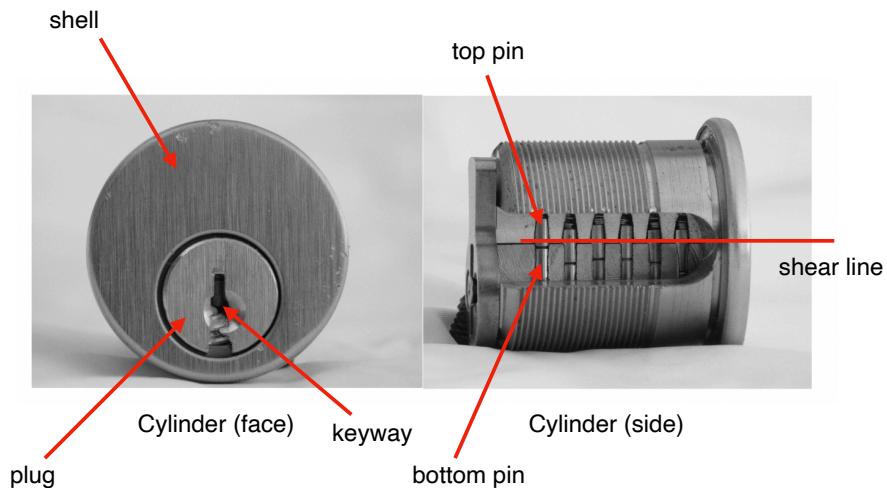
Announcements

- Friday's colloquium: **Su Lin Blodgett** (MSR Montreal) social implications of NLP tech.
- Final project presentations:
Sat, Dec 18 1:30-3pm
Sat, Dec 18 3:30-5pm

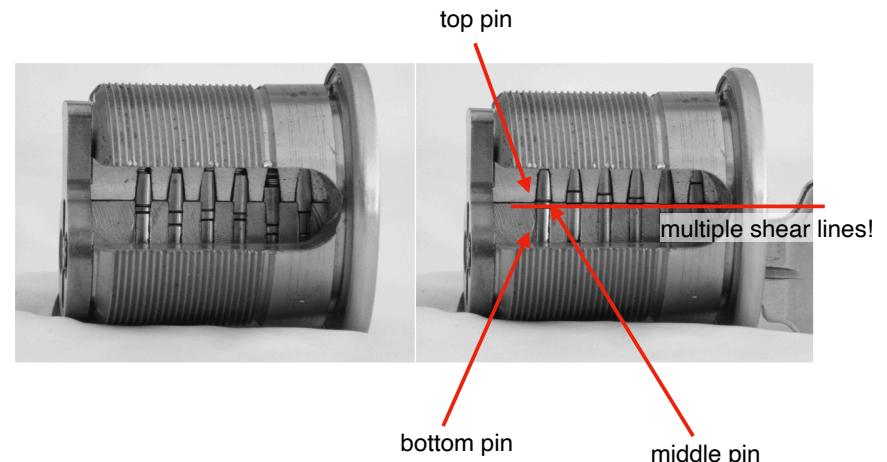
Your to-dos

1. Lab 7, **due Sunday 11/21**.
2. Last two reading responses:
 - a. Reading response (Provos), **due Wed 12/1**.
 - b. Reading response (Thompson/Stoll), **due Wed 12/8**.
3. Final project part 3, due Friday, **due 12/10**.

Pin tumbler lock



Master-keyed pin tumbler lock



Paper discussion (Blaze)

Motivations

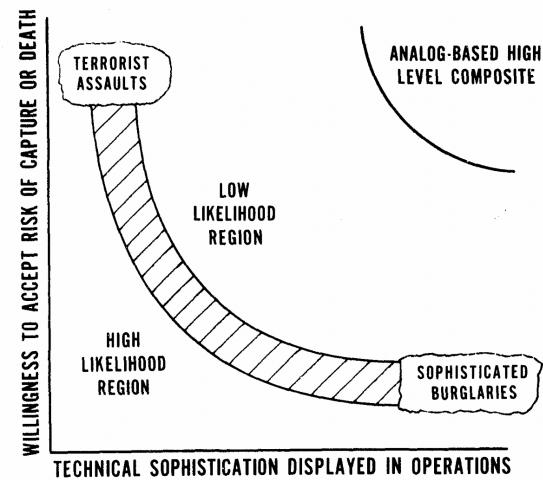


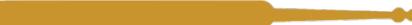
FIGURE 6. Dedication vs. sophistication.

Common vulnerabilities

Single-pin picking

hook pick 

diamond pick 

ball pick 

Single-pin picking is fun but is mostly a waste of time.

Multi-pin picking

rake 

Multi-pin picking (“raking”) is much more effective.

Demos

Lockpicking has limited practicality.

Doors



Mostly “secure” only on one side: the outside



Noooooooo!

Screw vulnerability



Notice screws are almost always on the *inside*.

Drop ceiling vulnerability



Walls frequently end at drop ceiling!

Brute force

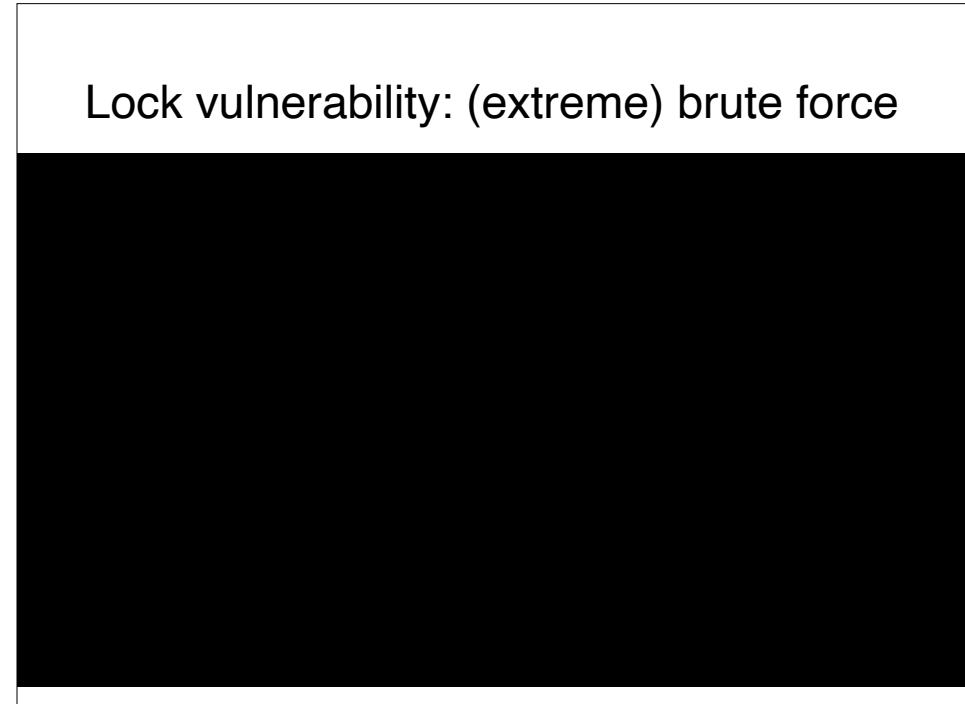
Lock vulnerability: brute force



Lock vulnerability: brute force



Lock vulnerability: (extreme) brute force



Lab 7 Q&A

Recap & Next Class

Today we learned:

More common physical vulnerabilities
Locks

Next class:

Something fun