

# Spies and Algorithms: The Ultimate Dream Team

Code Your Story: Session 1

## You're in a tight spot...

- You find yourself waking up, trapped in an unfamiliar room.
- There seems to be no easy/obvious way out, and any gadgets you've had (particularly communications devices) have been taken away or destroyed.

- Where are you?
- What's around you?



## You're in an extra tight spot

- You find yourself waking up again.
- The room was full of knockout gas, and someone took all the good stuff away.
- You're stuck with even fewer resources than before.



#### You're a survivor

- Still, you're a spy, and a good spy can always figure something out.
- Take a few minutes to write up an escape plan, using only what remains.



# Algorithms

- A sequence of steps that accomplish a task
  - An essential concept in computer science



# "Escape through the Window" as an Algorithm

- Lightly tap on the window to listen for a weak spot
- Wrap arm in your shirt
- Punch through the weak spot
- Remove the rest of the window
- Jump out



# "Escape through the Window" as an Algorithm

- Remove the wire from your braces
- Use the wire to pick the lock on the window
- Quietly open the window just enough
- Carefully wiggle out



### **Evaluating Algorithms**

- What are some of the differences in the algorithms we have?
- Do some of them have advantages or disadvantages?

- In this scenario, what makes an escape algorithm strong?
- Here, do we want to break out quickly? Quietly? Without getting hurt?



#### Check in

- Take about ten minutes to write how you've escaped!
  - Be clear about the exact steps you took (your algorithm!). This is going into an official report, after all, and other spies need to learn from your experience.
  - Plsu, all the cool details make for a fun story.



### Requesting extraction

- You've "borrowed" a cell phone—maybe from someone in a coffee shop or something.
- Take a few minutes to tell your handler (in a voicemail or several text messages) exactly how to find and get to you before the phone's owner notices.



### Requesting extraction

- You see your handler nearing your location, when the same shadowy group that captured you springs a trap! You escape, but your handler doesn't. And now: things are entirely up to you.
- You follow the group and your handler to a warehouse. After a good amount of sneaking, you find yourself in another sticky situation: you're in some kind of elevated observation platform, unable to get out because of all the henchmen swarming around. Your handler is below.
- In the room with you seems to be the control panel for a giant crane that could smash a way out for you and your handler. It's not working though. You do see, below, a comically large button, with an even comically larger, "Crane: Power ON" sign above it. Scattered on the floor are remote control toys of different types. That's when you realize there are a number of remote controls in the room with you.