July 10, 2025

**The job:**

Dice Inc. is a pioneer in the crypto AI space. Our inside sources say they have achieved AGI by leveraging a proprietary method for generating true randomness.

The four key authorization pillars that secure the agent are only accessible from a *vault* in the Dice Inc. compound. We need your skills to break in and destroy the model before it destroys us all.

**Your role:**

Your team needs to break into the Dice Inc. compound and compromise all four pillars while avoiding the various security systems. Do your best to accomplish this goal even if you cannot figure out how to bypass the various security measures. Triggering an alert is certainly a problem, but not the end of the world.

**What we know:**

Dice Inc. employs a cadre of devoted security staff, who keep the vault under constant surveillance. We've taken care of the usual security guard---she won't be showing up to work tomorrow. On her phone was a *mobile app* and a *badge*. The mobile app could help you *gain access to Dice Inc.'s security terminal*.

Our previous run-in with Dice Inc. was not so smooth. These are some security systems we encountered; we expect to see these tomorrow as well.

- Dice Inc. performs central monitoring of security guard patrolling. In our surveillance, guards tap their phones at designated locations on their patrol route through the vault. You might have to *simulate a patrol* so the guard's absence does not raise alerts.

- Some areas of the Dice Inc. compound have higher levels of access control. Although you can freely enter these spaces, you will need to tap a badge to avoid triggering alarms. Unfortunately, the security guard's badge does not have the requisite level of access control. We think the badge protocol could be insecure. In order to exploit the protocol, you might need to *approach some Dice Inc. employees* with the admin badge. For testing, we've dug through Dice Inc.'s e-waste and recovered one of their *badge readers*.

- The Dice Inc. compound has a camera surveillance system. It's important that you don't appear on the feed.

We've carefully scouted out the authorization pillars you need to compromise. You must do the following.

1. *Enter the correct combination* on a *switchboard-like device*. Based on *schematics* we found, we have constructed a replica for your testing. We can provide some additional electronic components to aid you.
2. *Steal* two items: the *hardware key* and a *password*.
3. *Hack the workstation* for the *encryption key*.

**Additional rules:**

- We will be scheduling teams to complete this challenge in different time slots on Day 2.
- You have fifteen minutes to attempt this challenge.
- Although your entire team can help (and possibly watch!) remotely, only one player may enter the vault. You will be provided with radios for communication, but mobile phones are okay too.
- The player can bring tools into the vault.
- Green tape is off-limits. If you have questions about what is and isn't allowed, ask an organizer.
- Scoring is a function of *triggered alerts* and *compromised authorization pillars*. The time *spent* is not relevant. Ties are broken towards the team that completed the challenge in an earlier time slot.

**Appendix:**

Switchboard sketch (one out of ten switches)