

# Penetration Testing

## **Testing the functionalities**

- ✓ Unit test, Integration test, Performance test and so on ...

## **Testing the security**

- ✓ Penetration tests
- Try to make the software fail by pushing the limits of a “normal” usage i.e test what the program is not supposed to do

# Vulnerability Detection

- **Static analysis (SAST)**

Analyze source or binary without running it

- **Fuzzing**

Automatically input generation to crash/trigger bugs

- **AI** (newest trend)

Uses LLM to understand code behavior and identify vulnerabilities

Aardvark (OpenAI) and Big Sleep (Google)