

# Lab: Abstract Interpretation

## (Week 9)

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# Assignment-3 Spec and Assignment-2 Marks Released

- Marks for Assignment-2 have been released and we will go through some of the issues today
- Remember to `git pull` or `docker pull` to get the code template for **Assignment-3**

## Quiz-3 + Lab-Exercise-3 + Assignment-3

- Quiz-3 (5 points) (due date: **23:59, Wednesday, Week 10**)
  - Abstract domain and soundness
  - Handling loops with widening and narrowing
- Lab-Exercise-3 (5 points) (due date: **23:59, Wednesday, Week 10**)
  - **Goal:** Coding exercise to manually update abstract trace based on abstract execution rules and verify the assertions embedded in the code.
  - **Specification:** <https://github.com/SVF-tools/Software-Security-Analysis/wiki/Lab-Exercise-3>
- Assignment-3 (25 points) (due date: **23:59, Wednesday, Week 11**)
  - **Goal:** Perform automated abstract trace update on ICFG for assertion checking and buffer overflow detection
  - **Specification:** <https://github.com/SVF-tools/Software-Security-Analysis/wiki/Assignment-3>
  - **SVF AE APIs:** <https://github.com/SVF-tools/Software-Security-Analysis/wiki/AE-APIs>