

Bomb Lab Recitation

Fall 2024-2025

Logistics

- The bomb lab **homework** will be announced tomorrow (October 25th)
- **2 weeks** to complete the homework

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- **2 weeks** to complete the homework

- After that, there will be a **lab exam (a.k.a. lab quiz)** (November 9th)
- Limited time to complete a similar assignment in the lab
- Details will be announced later

Logistics

You must get **at least 50 / 100** from the homework to become eligible for the lab exam

Algorithm 1 Lab Grading[illegible]

Introduction

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- Defuse a “bomb” executable
- It requires you to enter a specific string in each phase
- Reverse-engineer the executable to figure out
- **GOAL:** Practice your assembly reading skills and understand the way compiler converts C to x86.

The Bomb

- 6 phases
- Gets harder progressively
- Each student has a unique bomb
- The solution to each bomb is unique
- Each bomb is tested

Accessing the Bomb

- Your bomb will be delivered to you as a **feedback file** on the ODTUClass assignment page
- Contact me if you encounter any problems: ilker@ceng.metu.edu.tr

Running the Bomb

- You **must** run the bomb on inek machines.
- You are not allowed to use your personal computers for this homework.

Running the Bomb

- You **must** run the bomb on inek machines.
- You are not allowed to use your personal computers for this homework.
- Put your bomb to inek machines using `scp` or `sftp`.
- You can use `ssh` to work from home.

Grading

- Your activity (defusal and explosions) will be logged to a server automatically
- Each bomb explosion will cost you 0.5 points
- Max: 70 points
 - First 4 phases: 10 points
 - Last 2 phases: 15 points
- You can check your grade in real-time on **the scoreboard**
 - Updated every 30 seconds
 - Link is on the ODTUClass assignment page
- Your scoreboard grade will be taken into account, but make a submission on ODTUClass as well

Additional Resources

- GDB notes
- x64 cheatsheet
- Simplified bomb
 - Ungraded
 - Can run on your personal computers (unlike the real assignment which only runs on ineks)

Demo

Defusing the simplified bomb