



We only accept the homework **delivered via Yekta (yekta.iut.ac.ir)**, before the deadline. If you have any question or concerns about this homework, feel free to contact Mr. Taeizadeh via email: mohammadali-taeiz@gmail.com.

Theoretical Questions

Q1: What are the main causes of SQL injection vulnerabilities?

Q2: How can you prevent SQL injection in your applications?

Q3: What are the different types of SQL injection attacks?

Q4: How can you detect SQL injection vulnerabilities in an application?

Q5: What are the potential impacts of a successful SQL injection attack?

Please avoid uploading handwritten photos of your answer. It would be great if you type your answer and submit them in one pdf file.

Practical Question

Install wamp server on your system. Now, write a simple and insecure program with PHP that has a SQL Injection vulnerability. Then write a secure program using techniques and functions that are not vulnerable to SQL Injection and test it.

Hints: If you recall, in OWASP's DVWA, there were codes related to SQL Injection with varying security levels; you can review them and write your code given those vulnerabilities.

You can download wamp server from here: [wamp server](#)

You can download it from here: [OWASP](#)

Please prepare a video demonstrating the functionality of your program in both insecure and secure environments, showcasing how it operates under each scenario, and deliver it in Yekta.