

# Advanced Database

## Master's Course / Assignment 3

IUST, fall 2017

### NoSQL

Answer the following questions.

1. What is NoSQL?
2. How relational tables are modeled in different NoSQL databases?
3. How relationships are modeled in different NoSQL databases?
4. Why is it hard to run SQL on clusters?
5. How graph databases are ACID?  
*\*\*Hint: most graph databases (including Neo4j) use an ACID consistency model*
6. What is CAP theorem?
7. Which one is faster for “Insert”, NoSQL or RDBMS? Why?
8. Which one is faster for “Query”, NoSQL or RDBMS? Why?
9. What type of database (RDBMS/NoSQL) is more suitable for following use cases? Why?  
*\*\*Note: if you choose NoSQL, name its type (document, graph, etc.) and tell why*
  - a. User sessions
  - b. Product catalog
  - c. Recommendations
  - d. User activity logs
  - e. Financial data
  - f. Reporting
  - g. Analytics
  - h. Shopping cart