

CSE 414 Databases – Spring 2022

Assignment 2

Deadline (18.06.2022 Saturday, 23:55)

This assignment is not a group assignment. You must solve them by yourself. You must solve the questions on a paper, not a word document. Take the photo of the paper and upload it.

1- (12.5 points)

Write a trigger that increase (10%) salary of your employees in your company and show salary difference of employees after the salary increment. The employee table details are given as follows:

```
Employee (name, payment, empid)
```

2- (12.5 points)

Write a trigger that maintains referential integrity for on delete cascade. Using the trigger, when a department is deleted, the employees on that department also have to delete. The details of the tables are given below:

```
Employee (Name, Age, Address, Depid)
```

```
Department (Depid, Depname)
```

3- (25 points)

What are the advantages and disadvantages of using NoSQL databases? Explain each of them.

4- (25 points)

Give characteristics of blockchain databases. Explain each of the characteristic. What are the differences between blockchain databases and traditional databases?

5- (25 points)

What are the advantages and disadvantages of using a graph database?

What are the characteristics of Neo4j graph database?