

SRD2021 - Lecture 6

1. What is true for this code

```
SELECT concat(p.product_code, ' ', p.product_name)
FROM product AS p;
```

- ☐ (A) Retrieves two columns and presents as two separate columns in the result set: product code and product name
- ☒ (B) Retrieves two columns (product code and product name) and presents as one single column in the result set
- ☐ (C) May retrieve more than two columns if product code is not unique
- ☐ (D) All the options are wrong

2. You want to retrieve the average salary by year

- ☐ (A)

```
SELECT YEAR, AVG(s.salary)
FROM employees AS e, salaries AS s
WHERE e.emp_no = s.emp_no
GROUP BY e.hire_date
```
- ☐ (B)

```
SELECT e.hire_date, AVG(s.salary)
FROM employees AS e, salaries AS s
WHERE e.emp_no = s.emp_no
GROUP BY e.hire_date
```
- ☐ (C)

```
SELECT YEAR(e.hire_date) AS year, SUM(s.salary)
FROM employees AS e, salaries AS s
WHERE e.emp_no = s.emp_no
GROUP BY YEAR(e.hire_date)
```
- ☒ (D)

```
SELECT YEAR(e.hire_date) AS year, AVG(s.salary)
FROM employees AS e, salaries AS s
WHERE e.emp_no = s.emp_no
GROUP BY YEAR(e.hire_date)
```

3. What is true about a view

- ☐ (A) It is a virtual table without physical rows
- ☐ (B) The name of the view cannot be the same as the table
- ☐ (C) The view does not physically store the data
- ☒ (D) All the previous are true
- ☐ (E) None of the above

4. The trigger can be activated in the following events:

- ☒ (A) INSERT, UPDATE, DELETE
- ☐ (B) SELECT, INSERT, UPDATE, DELETE
- ☐ (C) INSERT and UPDATE
- ☐ (D) INSERT and DELETE

5. What is true about triggers:

- ☐ (A) Triggers do not affect performance
- ☒ (B) They may cause deadlock situations
- ☐ (C) Not appropriate for automatic auditing
- ☐ (D) Triggers are easy to debug

6. What is true about the query optimizer?

- ☒ (A) Usually generates multiple query plans.
- ☐ (B) Always generate one single query plan
- ☐ (C) The developer can choose which query plan to execute
- ☐ (D) All options are wrong

7. Which query is more efficient (assume the id and name are unique and have indexes)?

- ☐ (A) `SELECT * FROM tools
WHERE name='Screwdriver';`
- ☒ (B) `SELECT * FROM tools
WHERE id=3;`
- ☐ (C) `SELECT * FROM tools
WHERE name='Screwdriver' and id=3;`
- ☐ (D) There is not difference in terms of efficiency among the three queries