

OLIVIA OCTAVIA SUMAILAH AIT524 HOMEWORK ASSIGNMENT 11

1. Retrieved text to display my name and determine the position of a single blank space from the employee_tbl, and department_tbl tables using the join-using keyword.

```
SQL> SELECT 'olivia sumailah', INSTR('olivia sumailah', ' ') FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id);
'OLIVIASUMAILAH INSTR('OLIVIASUMAILAH',' ')
-----
olivia sumailah          7
olivia sumailah          7
olivia sumailah          7
SQL> OLIVIA
```

2. Extracted a substring that represented my last name by specifying the number of a character string from the employee_tbl, and department_tbl tables using the join-using keyword.

```
SQL> SELECT SUBSTR('sumailah', 8) FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id);
S
-
h
h
h
SQL> OLIVIA SUMAILAH
```

3. Extracted her full name, and a substring of the alias full name from the employee_tbl, and department_tbl tables using the join-using keyword.

```
SQL> SELECT 'emp_fname||' ||'emp_lname' AS " FULL NAMES", SUBSTR('FULL NAMES', INSTR('FULL NAMES', ' ') -4, 4) FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id);
FULL NAMES      SUBS
-----
emp_fname emp_lname FULL
emp_fname emp_lname FULL
emp_fname emp_lname FULL
SQL> SELECT 'emmanuela||' ||'smith' AS " FULL NAMES", SUBSTR('FULL NAMES', INSTR('FULL NAMES', ' ') -4, 4) FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id);
FULL NAMES      SUBS
-----
emmanuela smith FULL
emmanuela smith FULL
emmanuela smith FULL
SQL> OLIVIA
```

4. Extracted a substring, that represented my last name by assuming, that the length is unknown from the employee_tbl, and department_tbl tables using the join-using keyword.

```
SQL> SELECT SUBSTR('olivia sumailah', INSTR('olivia sumailah', ' ') +1, length('olivia sumailah')- INSTR('olivia sumailah', ' ')) FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id);
SUBSTR('
-----
sumailah
sumailah
sumailah
SQL> OSUMAILAH
```

5. Retrieved the last name of each employees in the employee_tbl table using a GROUP BY clause.

```
SQL> SELECT EMP_LNAME FROM EMPLOYEE_TBL GROUP BY EMP_LNAME;
EMP_LNAME
-----
sumailah
smith
mensah
SQL> OLIVIA
```

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6. Retrieved the last name of each employees in the employee_tbl table using a WHERE clause, and a GROUP BY clause.

```
SQL> SELECT EMP_LNAME FROM EMPLOYEE_TBL WHERE EMP_LNAME LIKE 's%' GROUP BY EMP_LNAME;
EMP_LNAME
-----
sumailah
smith
SQL> OLIVIA
```

7. Retrieved the last name of each employees in the employee_tbl table using a WHERE clause, a GROUP BY clause, and a HAVING statement.

```
SQL> SELECT EMP_LNAME FROM EMPLOYEE_TBL WHERE EMP_LNAME LIKE 's%' GROUP BY EMP_LNAME HAVING EMP_LNAME = 'mensah';
no rows selected
SQL> OLIVIA
```

8. Retrieved emp_id from the employee_tbl, department_tbl, and salariedemployee_tbl tables using a WHERE, a GROUP BY, and a HAVING statements.

```
SQL> SELECT EMP_ID FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (emp_id) JOIN SALARIEDEMPLOYEE_TBL using (dept_id) WHERE EMP_ID IS NOT NULL GROUP BY EMP_ID HAVING EMP_ID = 'GM670';
no rows selected
SQL> OLIVIA SUMAILAH
```

9. Retrieved dept_desc, and dept_location columns from the department_tbl using a where, and group by rollup statements.

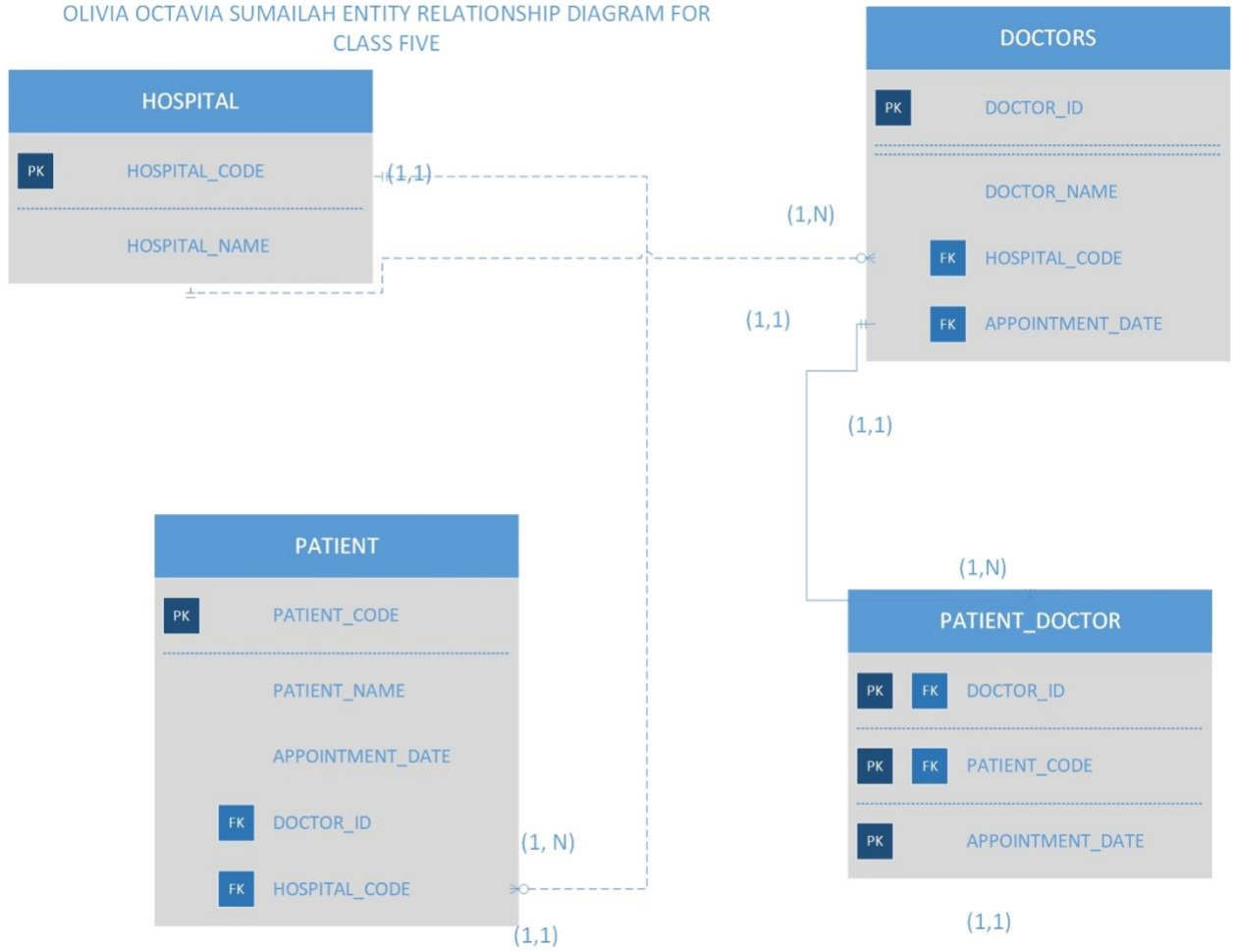
```
SQL> SELECT DEPT_DESC, DEPT_LOCATION FROM DEPARTMENT_TBL WHERE DEPT_ID IN ('GM670', 'OS248', 'ES832') GROUP BY ROLLUP(DEPT_DESC, DEPT_LOCATION) ORDER BY DEPT_DESC, DEPT_LOCATION;
no rows selected
SQL> OLIVIA SUMAILAH
```

10. Retrieved emp_id, emp_lname from the employee_tbl, and department_tbl, tables using a WHERE, a GROUP BY ROLLUP statements.

```
SQL> SELECT EMP_ID, EMP_LNAME FROM EMPLOYEE_TBL JOIN DEPARTMENT_TBL USING (EMP_ID) WHERE EMP_ID = 'GM670' GROUP BY ROLLUP (EMP_ID, EMP_LNAME) ORDER BY EMP_ID, EMP_LNAME;
EMP_ID EMP_LNAME
-----
GM670 mensah
GM670
SQL> OCTAVIA OLIVIA SUMAILAH
```

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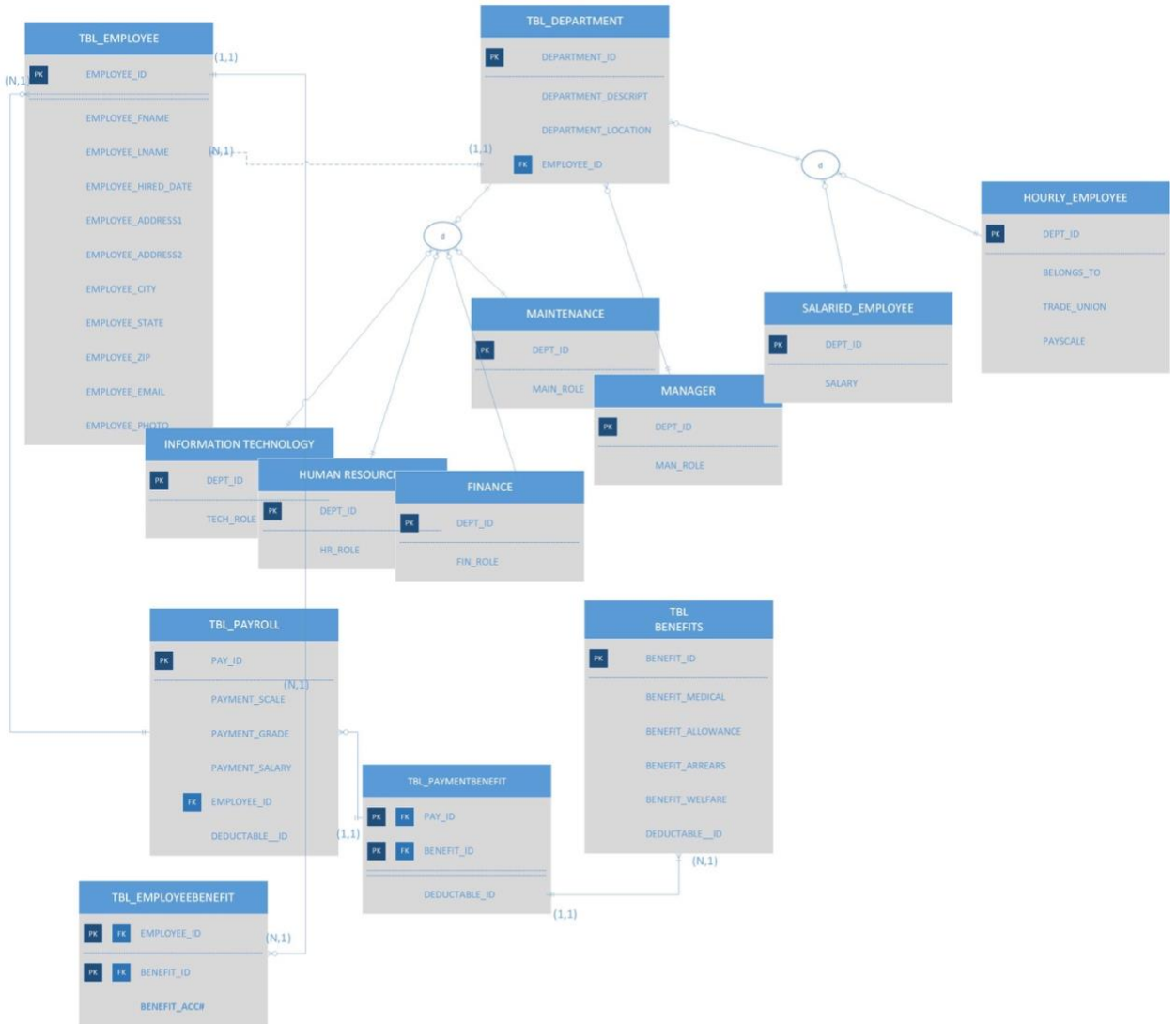
OLIVIA OCTAVIA SUMAILAH ENTITY RELATIONSHIP DIAGRAM FOR CLASS FIVE



OLIVIA OCTAVIA SUMAILAH AIT524 HOMEWORK ASSIGNMENT 11

OLIVIA OCTAVIA SUMAILAH AIT524-P01 HOMEWORK ASSIGNMENT3 SOLUTION

ENTITY RELATIONSHIPS (ER) AND THE EMBEDDED ENTITY RELATIONSHIP DIAGRAM FOR THE PROPOSED PAYROLL MANAGEMENT SYSTEM



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