

# OCTAVIA OLIVIA SUMAILAH AIT-524 HOMEWORK ASSIGNMENT9

## PAYROLL MANAGEMENT SYSTEM DATABASE DESIGN

### 1. ADDED THREE RECORDS INTO THE DEPARTMENT TABLE

```
SQL> DESC department_tbl
Name                               Null?   Type
-----
DEPT_ID                             NOT NULL CHAR(5)
DEPT_DESC                           VARCHAR2(35)
DEPT_LOCATION                        VARCHAR2(35)
EMP_ID                               NOT NULL CHAR(5)

SQL> █

SQL> INSERT INTO department_tbl VALUES ('IT876', 'information technology', 'Fairfax', '0S248');
INSERT INTO department_tbl VALUES ('IT876', 'information technology', 'Fairfax', '0S248')
1 row created.

SQL> INSERT INTO department_tbl VALUES ('HR638', 'human resource', 'Washington DC', 'ES832');
1 row created.

SQL> INSERT INTO department_tbl VALUES ('F1652', 'Finance', 'San Francisco', '0M670');
1 row created.

SQL> SELECT * FROM employee_tbl;

EMP_I EMP_FNAME                EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY                EMP_STATE                EMP_Z
-----
EMP_PHONE
-----
0S248 octavia                sumailah
01-NOV-18 off lee highway
fairfax                    virginia                22030
3408347632

EMP_I EMP_FNAME                EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY                EMP_STATE                EMP_Z
-----
EMP_PHONE
-----
ES832 emmanuella                smith
30-OCT-18 lamont dr
lanham                    maryland                20602
3817383938

EMP_I EMP_FNAME                EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY                EMP_STATE                EMP_Z
-----
EMP_PHONE
-----
0M670 Gifty                    mensah
01-SEP-18 pine hill
san francisco                california                96373
4159347490

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```

### 2. ADDED TWO RECORDS INTO THE INFORMATION TECHNOLOGY TABLE

```
SQL> DESC infor_tech_tbl
Name                               Null?   Type
-----
DEPT_ID                             NOT NULL CHAR(5)
TECH_ROLE                           VARCHAR2(55)

SQL> ALTER TABLE infor_tech_tbl DROP CONSTRAINT infor_tech_tbl_dept_id_fk;
Table altered.

SQL> INSERT INTO infor_tech_tbl VALUES ('0S248', 'information technology support');
1 row created.

SQL> INSERT INTO infor_tech_tbl VALUES ('JP934', 'IT technician');
1 row created.

SQL> SELECT * FROM infor_tech_tbl;

DEPT_ TECH_ROLE
-----
0S248 information technology support
JP934 IT technician

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```

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## 3. ADDED TWO RECORDS INTO THE HUMAN RESOURCE TABLE

```
SQL> ALTER TABLE humanresources_tbl DROP CONSTRAINT humanresources_tbl_fk;
Table altered.
SQL> INSERT INTO humanresources_tbl VALUES ('ES832', 'HR Assistant');
1 row created.
SQL> INSERT INTO humanresources_tbl VALUES ('AL090', 'HR Driver');
1 row created.
SQL> DESC humanresources_tbl;
Name                               Null?  Type
-----
DEPT_ID                             NOT NULL CHAR(5)
HR_ROLE                             VARCHAR2(55)
SQL> SELECT * FROM humanresources_tbl;
DEPT_ HR_ROLE
-----
ES832 HR Assistant
AL090 HR Driver
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```

## 4. ADDED TWO RECORDS INTO THE FINANCE TABLE

```
SQL> ALTER TABLE finance_tbl DROP CONSTRAINT finance_tbl_dept_id_fk;
Table altered.
SQL> INSERT INTO finance_tbl VALUES ('0M670', 'Assistant manager');
1 row created.
SQL> INSERT INTO finance_tbl VALUES ('UB100', 'Finance Manager');
1 row created.
SQL> DESC finance_tbl;
Name                               Null?  Type
-----
DEPT_ID                             NOT NULL CHAR(5)
FIN_ROLE                             VARCHAR2(55)
SQL> SELECT * FROM finance_tbl;
DEPT_ FIN_ROLE
-----
0M670 Assistant manager
UB100 Finance Manager
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```

## 5. ADDED TWO RECORDS INTO THE MAINTENANCE TABLE

```
SQL> ALTER TABLE maintenance_tbl DROP CONSTRAINT maintenance_tbl_dept_id_fk;
Table altered.
SQL> INSERT INTO maintenance_tbl VALUES ('ID789', 'maintenance supervisor');
1 row created.
SQL> INSERT INTO maintenance_tbl VALUES ('WK234', 'maintenance manager');
1 row created.
SQL> DESC maintenance_tbl
Name                               Null?  Type
-----
DEPT_ID                             NOT NULL CHAR(5)
MAIN_ROLE                             VARCHAR2(55)
SQL> SELECT * FROM maintenance_tbl;
DEPT_ MAIN_ROLE
-----
ID789 maintenance supervisor
WK234 maintenance manager
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```

## 6. ADDED TWO RECORDS INTO THE MANAGER TABLE

```
SQL> ALTER TABLE manager_tbl DROP CONSTRAINT manager_tbl_dept_id_fk;
Table altered.
SQL> INSERT INTO manager_tbl VALUES ('WK234', 'maintenance manager');
1 row created.
SQL> INSERT INTO manager_tbl VALUES ('UB100', 'Finance Manager');
1 row created.
SQL> DESC manager_tbl
Name                               Null?  Type
-----
DEPT_ID                             NOT NULL CHAR(5)
MAN_ROLE                             VARCHAR2(55)
SQL> SELECT * FROM manager_tbl;
DEPT_ MAN_ROLE
-----
WK234 maintenance manager
UB100 Finance Manager
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```

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## 7. ADDED THREE RECORDS INTO THE SALARIED EMPLOYEES TABLE

```
SQL> ALTER TABLE salariedemployee_tbl DROP CONSTRAINT salemp_tbl_dept_id_fk;
Table altered.
SQL> INSERT INTO salariedemployee_tbl VALUES ('E5832');
1 row created.
SQL> INSERT INTO salariedemployee_tbl VALUES ('OS248');
1 row created.
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```

## 8. ADDED THREE RECORDS INTO THE HOURLY EMPLOYEES TABLE

```
SQL> ALTER TABLE hourlyemployees_tbl DROP CONSTRAINT hourlyemp_tbl_dept_id_fk;
Table altered.
SQL> INSERT INTO hourlyemployees_tbl VALUES ('E5832', 'Emmanuella Smith', 'Wales', 27);
1 row created.
SQL> INSERT INTO hourlyemployees_tbl VALUES ('U100', 'Umaru Barrie', 'labor union', 40);
1 row created.
SQL> INSERT INTO hourlyemployees_tbl VALUES ('WK234', 'Whem Luz', 'labour union', 20);
1 row created.
SQL> DESC hourlyemployees_tbl
Name Null? Type
-----
DEPT_ID NOT NULL CHAR(5)
BELONG_TO VARCHAR2(55)
TRADE_UNION VARCHAR2(55)
PAY_SCALE NUMBER(5)
SQL> SELECT * FROM hourlyemployees_tbl;
DEPT_ BELONG_TO
-----
TRADE_UNION PAY_SCALE
-----
U100 Umaru Barrie
labor union 40
E5832 Emmanuella Smith
Wales 27
WK234 Whem Luz
labour union 20
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```

## 9. ADDED THREE RECORDS INTO THE EMPLOYEE TABLE

```
SQL> INSERT INTO employee_tbl VALUES ('OS248', 'octavia', 'sumailah', '01-NOV-18', 'off lee highway', 'fairfax', 'virginia', '22030', 3408347632);
1 row created.
SQL> INSERT INTO employee_tbl VALUES ('E5832', 'emmanuella', 'smith', '30-Oct-18', 'lamont dr', 'lanham', 'maryland', '20602', 3017383938);
1 row created.
SQL> INSERT INTO employee_tbl VALUES ('OM670', 'Gifty', 'mensah', '01-Sep-18', 'pine hill', 'san francisco', 'california', '96373', 4159347498);
1 row created.
SQL> SELECT * FROM employee_tbl;
EMP_I EMP_FNAME EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY EMP_STATE EMP_Z
-----
EMP_PHONE
-----
OS248 octavia sumailah
01-NOV-18 off lee highway
fairfax virginia 22030
3408347632

EMP_I EMP_FNAME EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY EMP_STATE EMP_Z
-----
EMP_PHONE
-----
E5832 emmanuella smith
30-OCT-18 lamont dr
lanham maryland 20602
3017383938

EMP_I EMP_FNAME EMP_LNAME
-----
EMP_HIRED EMP_ADDRESS
-----
EMP_CITY EMP_STATE EMP_Z
-----
EMP_PHONE
-----
OM670 Gifty mensah
01-SEP-18 pine hill
san francisco california 96373
4159347498
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```

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```
SQL> DESC department_tbl
Name
-----
DEPT_ID          NOT NULL CHAR(5)
DEPT_DESC        VARCHAR2(35)
DEPT_LOCATION    VARCHAR2(35)
EMP_ID           NOT NULL CHAR(5)

SQL> DESC employee_tbl
Name
-----
EMP_ID           NOT NULL CHAR(5)
EMP_FNAME        VARCHAR2(35)
EMP_LNAME        VARCHAR2(35)
EMP_HIRED_DATE   DATE
EMP_ADDRESS      VARCHAR2(55)
EMP_CITY         VARCHAR2(35)
EMP_STATE        VARCHAR2(35)
EMP_ZIP          NOT NULL CHAR(5)
EMP_PHONE        NOT NULL NUMBER(10)
```

## 10. ADDED THREE RECORDS INTO THE PAYROLL TABLE

```
SQL> INSERT INTO payroll_tbl VALUES (46211, '4', 2000.00, 100);
1 row created.

SQL> INSERT INTO payroll_tbl VALUES (62435, '2', 1000.00, 210);
1 row created.

SQL> INSERT INTO payroll_tbl VALUES (21345, '3', 1500.00,80);
1 row created.

SQL> DESC payroll_tbl
Name
-----
PAY_ID          NOT NULL NUMBER(5)
SAL_GRADE       CHAR(2)
SALARY          NUMBER(7,2)
DEDUCT_ID       NUMBER(5)

SQL> SELECT * FROM payroll_tbl;

  PAY_ID SA   SALARY DEDUCT_ID
-----
  46211 4     2000      100
  62435 2     1000      210
  21345 3     1500       80

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```

## 11. ADDED THREE RECORDS INTO THE PAYROLLBENEFITS TABLE

```
SQL> INSERT INTO payrollbenefits_tbl VALUES (46211, 34048, 27589);
1 row created.

SQL> INSERT INTO payrollbenefits_tbl VALUES (62435, 78211, 32801);
1 row created.

SQL> INSERT INTO payrollbenefits_tbl VALUES (21345, 56231, 42211);
1 row created.

SQL> DESC payrollbenefits_tbl
Name
-----
PAY_ID          NOT NULL NUMBER(5)
BEN_ID          NOT NULL NUMBER(5)
DEDUCT_ID       NUMBER(5)

SQL> SELECT * FROM payrollbenefits_tbl;

  PAY_ID BEN_ID DEDUCT_ID
-----
  46211  34048  27589
  62435  78211  32801
  21345  56231  42211

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```

## 12. ADDED THREE RECORDS INTO THE BENEFITS TABLE

```
SQL> DESC benefits_tbl
Name
-----
BEN_ID          NOT NULL NUMBER(5)
SAL_SCALE       NUMBER(7,2)
ALLOWANCE       NUMBER(7,2)
WELFARE         NUMBER(7,2)
DEDUCT_ID       NUMBER(5)

SQL> INSERT INTO benefits_tbl VALUES (34048, 4, 1000.00, 2500.00,3321);
1 row created.

SQL> INSERT INTO benefits_tbl VALUES (78211, 3, 1300.00, 2200.00,32801);
1 row created.

SQL> INSERT INTO benefits_tbl VALUES (56231, 2, 79.00, 3000.00, 42211);
1 row created.

SQL> SELECT * FROM benefits_tbl;

  BEN_ID SAL_SCALE ALLOWANCE WELFARE DEDUCT_ID
-----
  34048    4       1000      2500    3321
  78211    3       1300      2200    32801
  56231    2         79       3000    42211

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```

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## 13. ADDED THREE RECORDS INTO THE EMPLOYEEBENEFITS TABLE

```
SQL> INSERT INTO employeebenefits_tbl VALUES ('OS248', 34048, 6726393621);
1 row created.
SQL> INSERT INTO employeebenefits_tbl VALUES ('ES832', 78211, 9002116789);
1 row created.
SQL> INSERT INTO employeebenefits_tbl VALUES ('GM670', 56231, 6302668009);
1 row created.
SQL> DESC employeebenefits_tbl
-----
Name                               Null?   Type
-----
EMP_ID                             NOT NULL CHAR(5)
BEN_ID                             NOT NULL NUMBER(5)
BEN_ACC#                           NOT NULL NUMBER(10)
SQL> SELECT * FROM employeebenefits_tbl;
EMP_ID  BEN_ID  BEN_ACC#
-----
OS248   34048   6726393621
ES832   78211   9002116789
GM670   56231   6302668009
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```

## 14. ADDED THREE RECORDS INTO THE HOPITAL TABLE

```
SQL> INSERT INTO hospital_tbl VALUES ('FH982', 'fairfax hospital');
1 row created.
SQL> INSERT INTO hospital_tbl VALUES ('WD234', 'Washington Dc Hospital');
1 row created.
SQL> INSERT INTO hospital_tbl VALUES ('AX827', 'Alexandra hospital');
1 row created.
SQL> DESC hospital_tbl
-----
Name                               Null?   Type
-----
HOSP_CODE                         NOT NULL CHAR(5)
HOSP_NAME                         VARCHAR2(55)
SQL> SELECT * FROM hospital_tbl;
HOSP_ HOSP_NAME
-----
WD234 Washington Dc Hospital
AX827 Alexandra hospital
FH982 fairfax hospital
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```

## 15. ADDED THREE RECORDS INTO THE DOCTORS TABLE

```
SQL> INSERT INTO doctors_tbl VALUES ('RD974', 'Raymond Dixon', 'FH982', '09-Nov-18');
1 row created.
SQL> INSERT INTO doctors_tbl VALUES ('CK384', 'Chie Khan', 'WD234', '12-Dec-18');
1 row created.
SQL> INSERT INTO doctors_tbl VALUES ('ML345', 'Moe Lim', 'AX827', '29-Nov-18');
1 row created.
SQL> DESC doctors_tbl
-----
Name                               Null?   Type
-----
DOCTOR_ID                         NOT NULL CHAR(5)
DOCTOR_NAME                       VARCHAR2(55)
HOSP_CODE                         CHAR(5)
APPOINT_DATE                      DATE
SQL> SELECT * FROM doctors_tbl;
DOCTO DOCTOR_NAME                               HOSP_ APPOINT_D
-----
CK384 Chie Khan                               WD234 12-DEC-18
ML345 Moe Lim                                 AX827 29-NOV-18
RD974 Raymond Dixon                          FH982 09-NOV-18
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```

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## 16. ADDED THREE RECORDS INTO THE PATIENT TABLE

```
SQL> INSERT INTO patient_tbl VALUES ('EJ526', 'eleanor jones', '02-Nov-18', 'RD974', 'FH982');
1 row created.
```

```
SQL> INSERT INTO patient_tbl VALUES ('HK288', 'Hassan Karimu', '19-May-07', 'CK384', 'WD234');
1 row created.
```

```
SQL> INSERT INTO patient_tbl VALUES ('AW844', 'Anolda Wilson', '28-Feb-19', 'ML345', 'AXB27');
1 row created.
```

```
SQL> DESC patient_tbl
-----
Name                               Null?   Type
-----
PAT_CODE                            NOT NULL CHAR(5)
PAT_NAME                            VARCHAR2(55)
APPOINT_DATE                         DATE
DOCTOR_ID                           CHAR(5)
HOSP_CODE                           CHAR(5)
```

```
SQL> SELECT * FROM patient_tbl;
```

```
PAT_C PAT_NAME                               APPOINT_D DOCTO
-----
HOSP_
-----
EJ526 eleanor jones                          02-NOV-18 RD974
FH982
HK288 Hassan Karimu                          19-MAY-07 CK384
WD234
AW844 Anolda Wilson                          28-FEB-19 ML345
AX827
```

```
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```

## 17. ADDED THREE RECORDS INTO THE PATIENTDOCTORS TABLE FROM PATIENT TABLE

```
SQL> INSERT INTO patientdoctor_tbl (doctor_id, pat_code, appoint_date) SELECT doctor_id, pat_code, appoint_date FROM patient_tbl;
3 rows created.
```

```
SQL> DESC patient_tbl
-----
Name                               Null?   Type
-----
PAT_CODE                            NOT NULL CHAR(5)
PAT_NAME                            VARCHAR2(55)
APPOINT_DATE                         DATE
DOCTOR_ID                           CHAR(5)
HOSP_CODE                           CHAR(5)
```

```
SQL> DESC patientdoctor_tbl
-----
Name                               Null?   Type
-----
DOCTOR_ID                            NOT NULL CHAR(5)
PAT_CODE                              NOT NULL CHAR(5)
APPOINT_DATE                          DATE
```

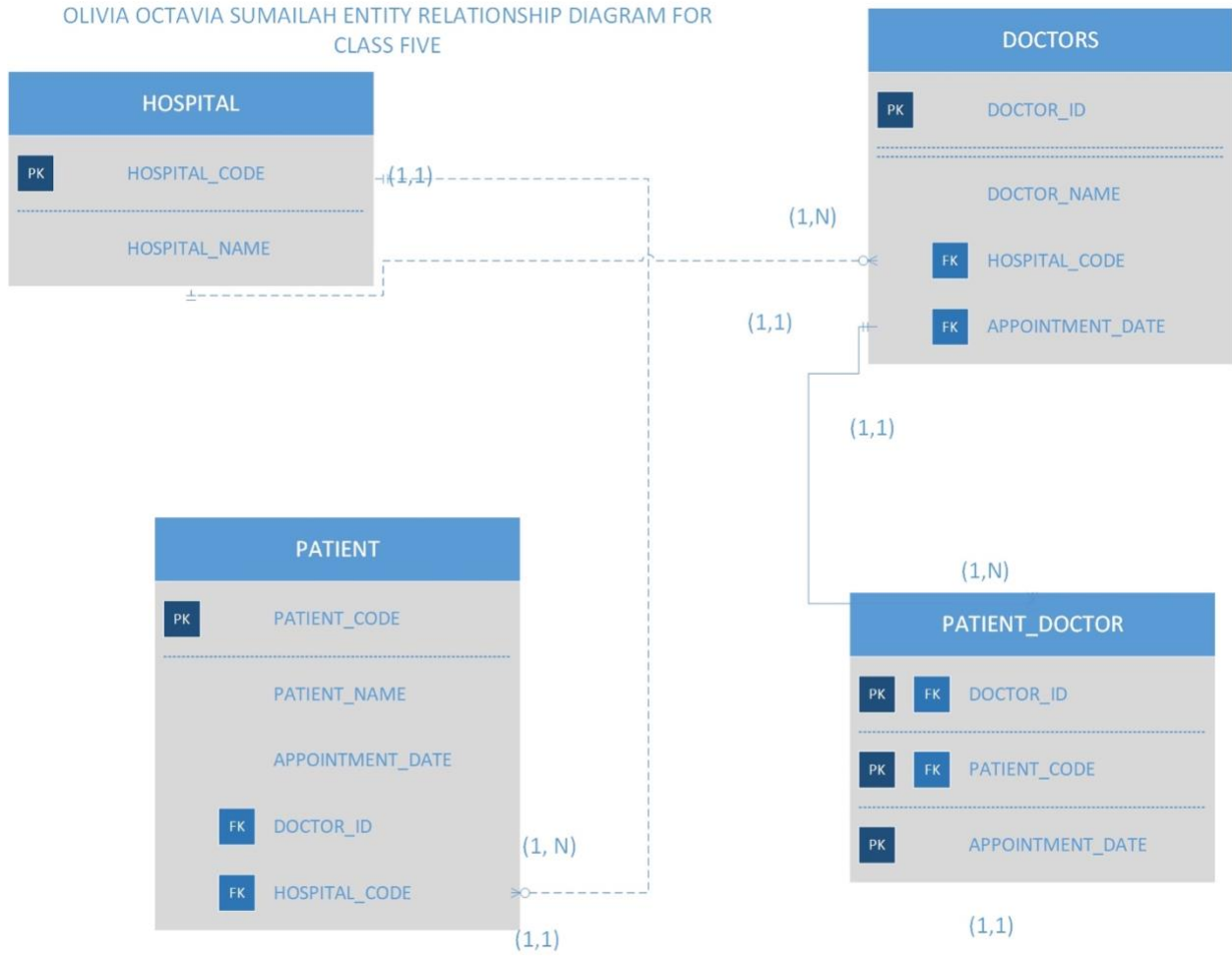
```
SQL> SELECT * FROM patientdoctor_tbl;
```

```
DOCTO PAT_C APPOINT_D
-----
RD974 EJ526 02-NOV-18
CK384 HK288 19-MAY-07
ML345 AW844 28-FEB-19
```

```
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```

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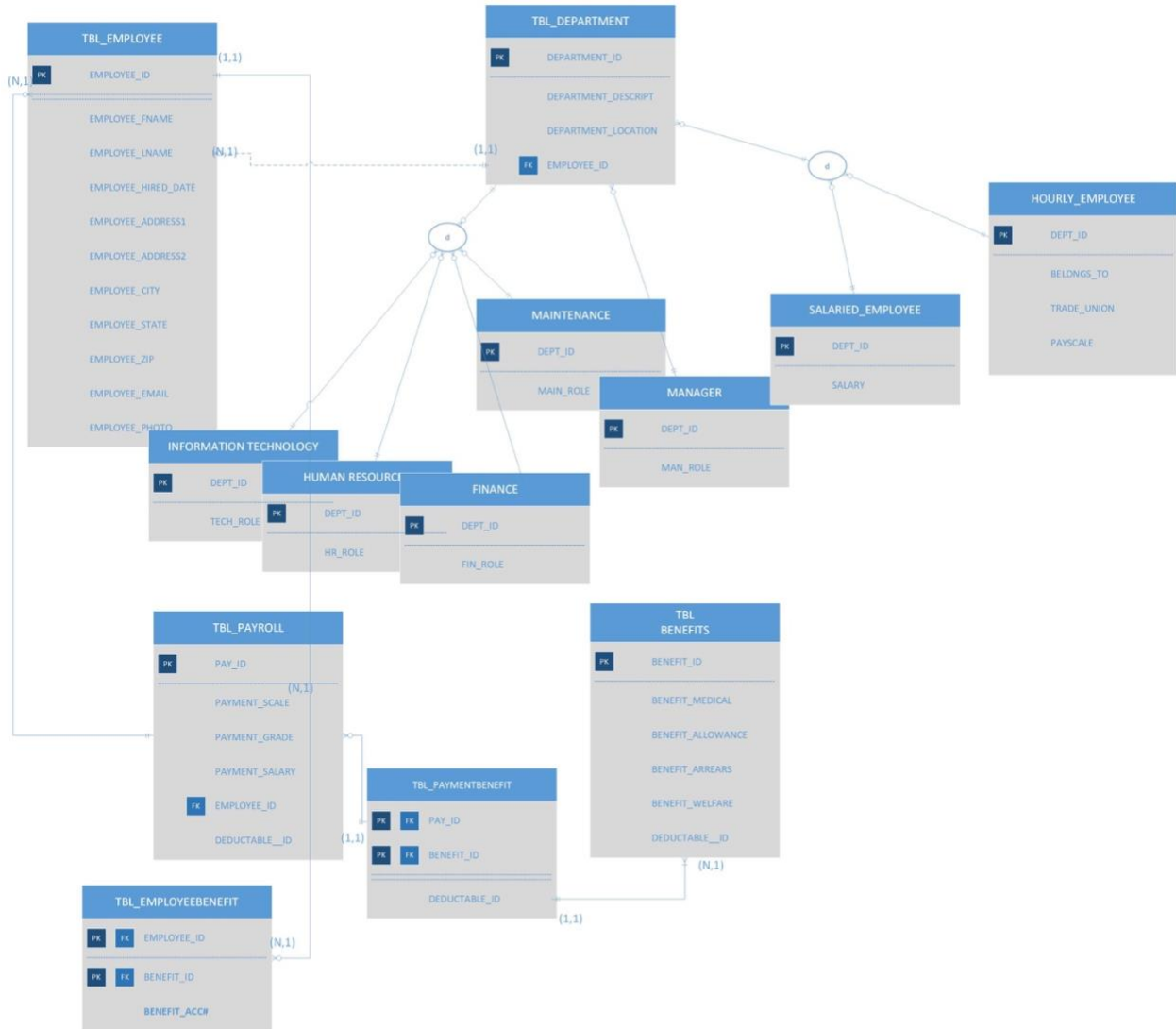
OLIVIA OCTAVIA SUMAILAH ENTITY RELATIONSHIP DIAGRAM FOR CLASS FIVE



# OCTAVIA OLIVIA SUMAILAH AIT-524 HOMEWORK ASSIGNMENT9

OLIVIA OCTAVIA SUMAILAH AIT524-P01 HOMEWORK ASSIGNMENT3 SOLUTION

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



(1,1)