**Task 1.2 (SQL-Oracle)**

**Stage 1:**

* Construct and ER-Diagram for the above-mentioned Requirement

A picture containing graphical user interface

Description automatically generated

* Construct Tables has per the ER-Diagram. Identify the relationships between tables and use appropriate standards for the same where applicable.

Table 1- EMPLOYEE\_JOINING\_STATUS

CREATE TABLE "HR"."EMPLOYEE\_JOINING\_STATUS"

(

"CANDIDATE\_REF" NUMBER(10) PRIMARY KEY,

"STATUS" VARCHAR2(15),

CONSTRAINT fk\_hr\_status

FOREIGN KEY(CANDIDATE\_REF) REFERENCES HR\_HIRING\_DETAILS(CANDIDATE\_REF)

);

Employee Joining Status has the primary key as Candidate\_Ref with Candidate\_Ref being the foreign key from HR\_HIRING\_DETAILS and is a weak entity, having one to one (1-1) relationship with HR\_HIRING\_DETAILS implying one candidate can have the status as Joined/Not Joined.

Table 2- HR\_HIRING\_DETAILS

CREATE TABLE "HR"."HR\_HIRING\_DETAILS"

(

"CANDIDATE\_REF" NUMBER(10) PRIMARY KEY,

"DOJ\_EXTENDED" VARCHAR2(4),

"DURATION\_TO\_ACCEPT\_OFFER" NUMBER(10),

"NOTICE\_PERIOD" NUMBER(10),

"OFFERED\_BAND" VARCHAR2(5),

"PECENT\_HIKE\_EXPECTED\_IN\_CTC" NUMBER(5,2),

"PERCENT\_HIKE\_OFFERED\_IN\_CTC" NUMBER(5,2),

"PERCENT\_DIFFERENCE\_CTC" NUMBER(5,2),

"JOINING\_BONUS" VARCHAR2(4),

"CANDIDATE\_RELOCATE\_ACTUAL" VARCHAR2(4),

"GENDER" VARCHAR2(10),

"CANDIDATE\_SOURCE" VARCHAR2(15),

"REX\_IN\_YRS" NUMBER(10),

"LOCATION" VARCHAR2(20),

"AGE" NUMBER(3),

"LOB\_ID" NUMBER(1)

);

HR\_HIRING\_DETAILS is the master table having the primary key as Candidate\_Ref and is a strong entity, having one to one (1-1) relationship with EMPLOYEE\_JOINING\_STATUS and one to many (1-N) relationship with LOB\_MAPPING\_P4.

Table 3- LOB\_MAPPING\_P4

CREATE TABLE "HR"."LOB\_MAPPING\_P4"

( "LOB\_ID" NUMBER(1) PRIMARY KEY,

"LOB" VARCHAR2(15),

CONSTRAINT fk\_hr\_lob

FOREIGN KEY(LOB\_ID) REFERENCES HR\_HIRING\_DETAILS(LOB\_ID)

);

LOB\_MAPPING\_P4 has the primary key as LOB\_ID with LOB\_ID being the foreign key from HR\_HIRING\_DETAILS and is a strong entity, having one to many (1-N) relationship with HR\_HIRING\_DETAILS implying many candidates can have the same LOB\_ID.

* Insert the appropriate data into the identified tables from the sample dataset provided.

EMPLOYEE\_JOINING\_STATUS

Insert into HR.EMPLOYEE\_JOINING\_STATUS (CANDIDATE\_REF,STATUS) values (2284852,'Not Joined');

Insert into HR.EMPLOYEE\_JOINING\_STATUS (CANDIDATE\_REF,STATUS) values (2284855,'Joined');

Insert into HR.EMPLOYEE\_JOINING\_STATUS (CANDIDATE\_REF,STATUS) values (2284875,'Joined');

Insert into HR.EMPLOYEE\_JOINING\_STATUS (CANDIDATE\_REF,STATUS) values (2284892,'Joined');

Insert into HR.EMPLOYEE\_JOINING\_STATUS (CANDIDATE\_REF,STATUS) values (2284921,'Joined');

HR\_HIRING\_DETAILS

Insert into HR.HR\_HIRING\_DETAILS (CANDIDATE\_REF,DOJ\_EXTENDED,DURATION\_TO\_ACCEPT\_OFFER,NOTICE\_PERIOD,OFFERED\_BAND,PECENT\_HIKE\_EXPECTED\_IN\_CTC,PERCENT\_HIKE\_OFFERED\_IN\_CTC,PERCENT\_DIFFERENCE\_CTC,JOINING\_BONUS,CANDIDATE\_RELOCATE\_ACTUAL,GENDER,CANDIDATE\_SOURCE,REX\_IN\_YRS,LOCATION,AGE,LOB\_ID) values (2113315,'No',0,0,'E2',29.3,29.3,0,'No','Yes','Male','Direct',11,'Noida',34,2);

Insert into HR.HR\_HIRING\_DETAILS (CANDIDATE\_REF,DOJ\_EXTENDED,DURATION\_TO\_ACCEPT\_OFFER,NOTICE\_PERIOD,OFFERED\_BAND,PECENT\_HIKE\_EXPECTED\_IN\_CTC,PERCENT\_HIKE\_OFFERED\_IN\_CTC,PERCENT\_DIFFERENCE\_CTC,JOINING\_BONUS,CANDIDATE\_RELOCATE\_ACTUAL,GENDER,CANDIDATE\_SOURCE,REX\_IN\_YRS,LOCATION,AGE,LOB\_ID) values (2113885,'No',2,0,'E2',40,50,7.14,'No','Yes','Male','Direct',5,'Noida',32,2);

Insert into HR.HR\_HIRING\_DETAILS (CANDIDATE\_REF,DOJ\_EXTENDED,DURATION\_TO\_ACCEPT\_OFFER,NOTICE\_PERIOD,OFFERED\_BAND,PECENT\_HIKE\_EXPECTED\_IN\_CTC,PERCENT\_HIKE\_OFFERED\_IN\_CTC,PERCENT\_DIFFERENCE\_CTC,JOINING\_BONUS,CANDIDATE\_RELOCATE\_ACTUAL,GENDER,CANDIDATE\_SOURCE,REX\_IN\_YRS,LOCATION,AGE,LOB\_ID) values (2114740,'No',6,0,'E3',30,40.85,8.34,'Yes','No','Male','Direct',10,'Chennai',32,2);

Insert into HR.HR\_HIRING\_DETAILS (CANDIDATE\_REF,DOJ\_EXTENDED,DURATION\_TO\_ACCEPT\_OFFER,NOTICE\_PERIOD,OFFERED\_BAND,PECENT\_HIKE\_EXPECTED\_IN\_CTC,PERCENT\_HIKE\_OFFERED\_IN\_CTC,PERCENT\_DIFFERENCE\_CTC,JOINING\_BONUS,CANDIDATE\_RELOCATE\_ACTUAL,GENDER,CANDIDATE\_SOURCE,REX\_IN\_YRS,LOCATION,AGE,LOB\_ID) values (2114758,'Yes',37,90,'E1',99,77.86,-10.6,'No','No','Male','Direct',4,'Bangalore',28,4);

Insert into HR.HR\_HIRING\_DETAILS (CANDIDATE\_REF,DOJ\_EXTENDED,DURATION\_TO\_ACCEPT\_OFFER,NOTICE\_PERIOD,OFFERED\_BAND,PECENT\_HIKE\_EXPECTED\_IN\_CTC,PERCENT\_HIKE\_OFFERED\_IN\_CTC,PERCENT\_DIFFERENCE\_CTC,JOINING\_BONUS,CANDIDATE\_RELOCATE\_ACTUAL,GENDER,CANDIDATE\_SOURCE,REX\_IN\_YRS,LOCATION,AGE,LOB\_ID) values (2114973,'No',3,60,'E1',125,105,-8.89,'No','No','Male','Employee Referral',2,'Noida',26,5);

LOB\_MAPPING\_P4

Insert into HR.LOB\_MAPPING\_P4 (LOB\_ID,LOB) values (1,'ERS');

Insert into HR.LOB\_MAPPING\_P4 (LOB\_ID,LOB) values (2,'INFRA');

Insert into HR.LOB\_MAPPING\_P4 (LOB\_ID,LOB) values (3,'Healthcare');

Insert into HR.LOB\_MAPPING\_P4 (LOB\_ID,LOB) values (4,'BFSI');

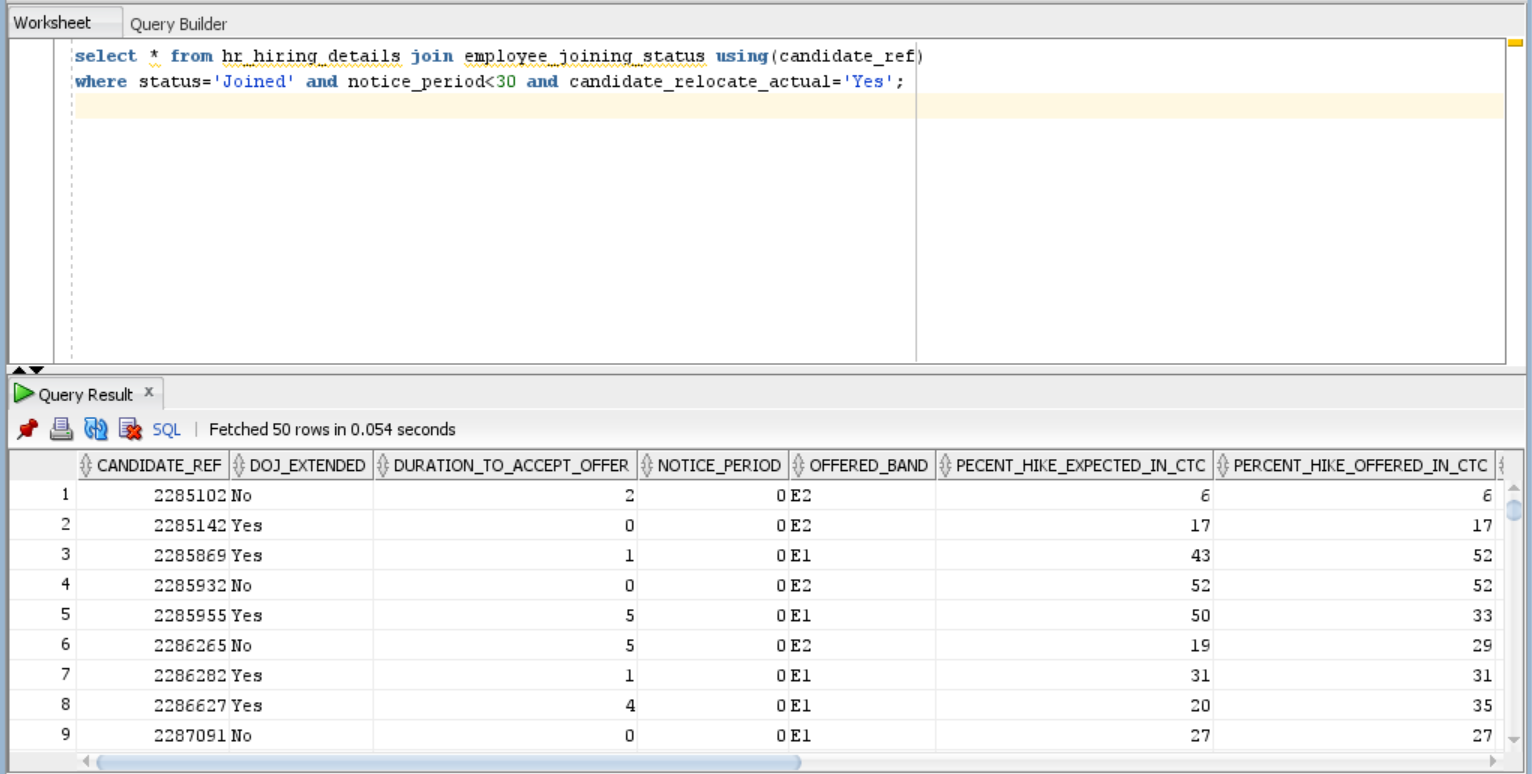
Insert into HR.LOB\_MAPPING\_P4 (LOB\_ID,LOB) values (5,'CSMP');

**Stage 2:**

* Generate Info those candidates who have accepted offer and joining time is less then 30 days and candidates who are ready to re-locate.

select \* from hr\_hiring\_details join employee\_joining\_status using(candidate\_ref)

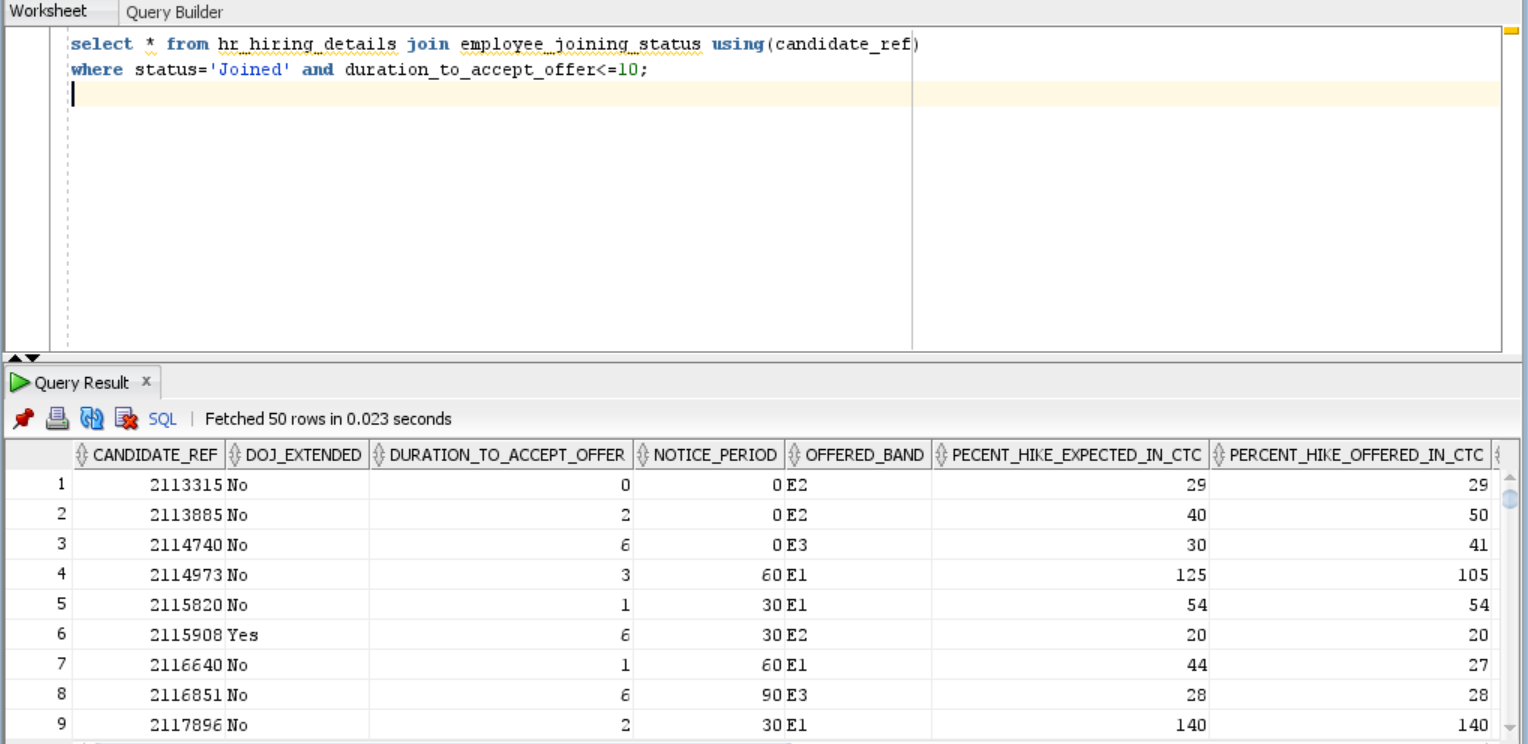
where status='Joined' and notice\_period<30 and candidate\_relocate\_actual='Yes';



* Generate Info those candidates who have accepted offer and also display list the candidates who have been offered and yet to accept the offer within 10 days;

select \* from hr\_hiring\_details join employee\_joining\_status using(candidate\_ref)

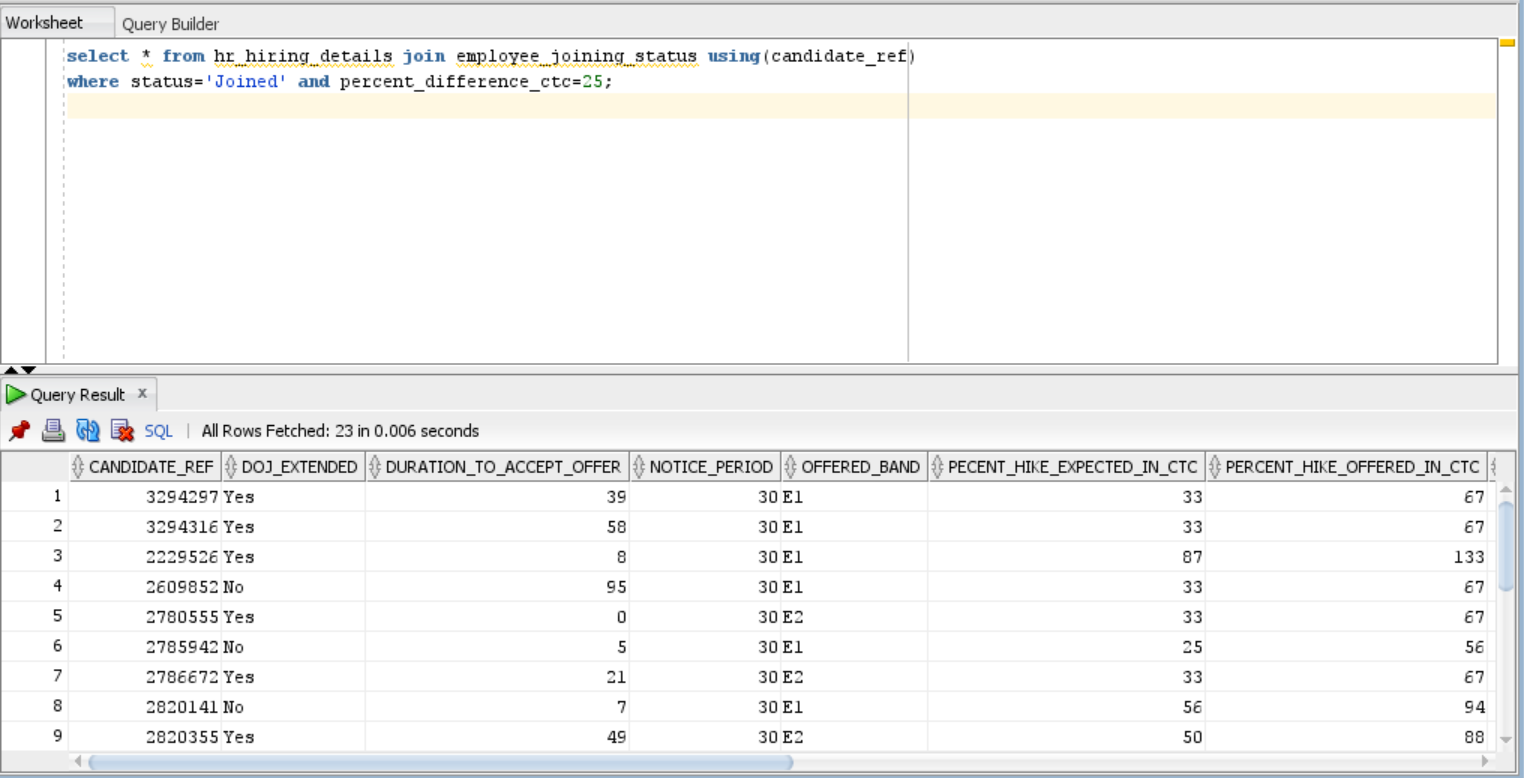
where status='Joined' and duration\_to\_accept\_offer<=10;



* Generate Info those candidates who are willing to join and the ECTC is 25% hike from their CTC.

select \* from hr\_hiring\_details join employee\_joining\_status using(candidate\_ref)

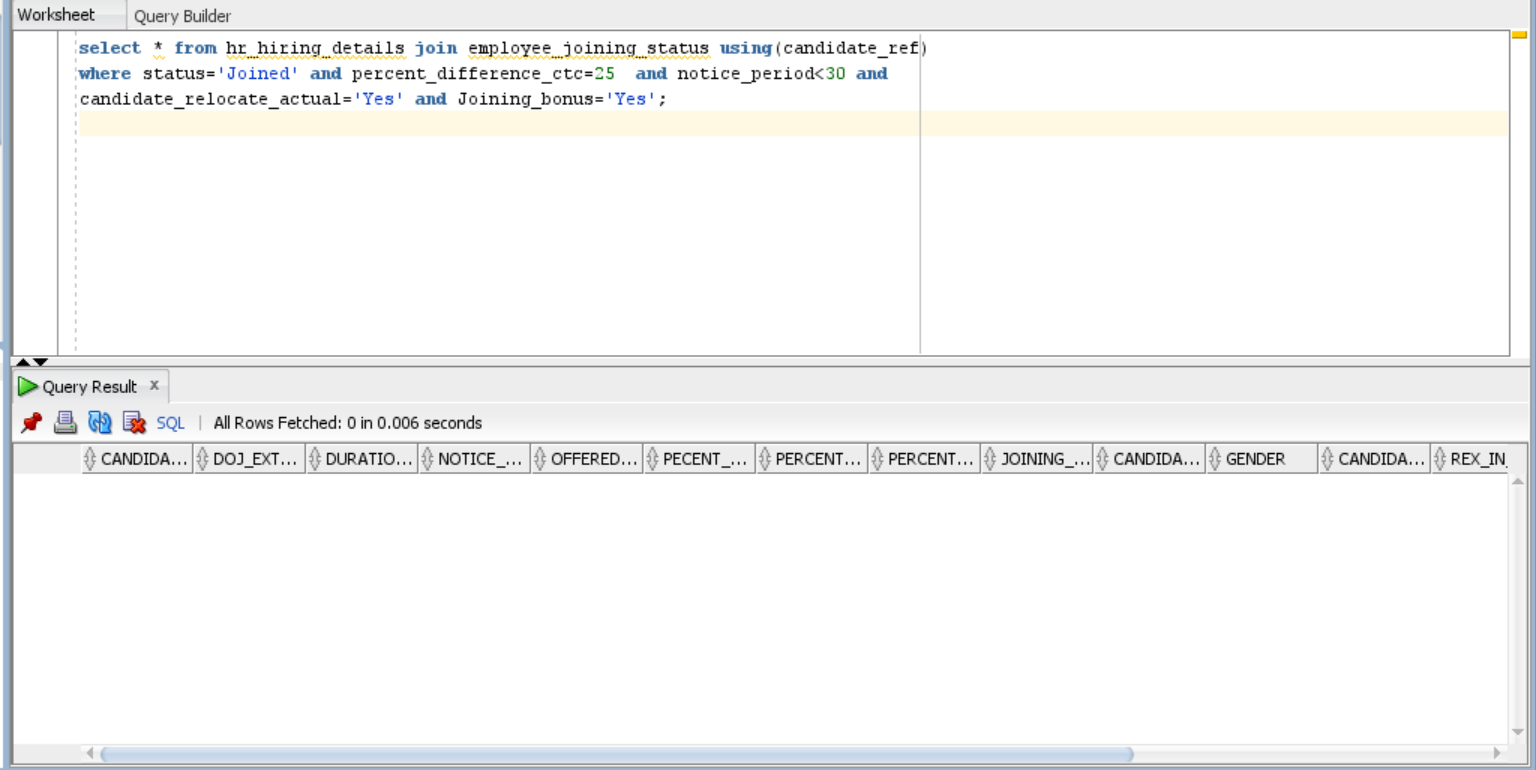
where status='Joined' and percent\_difference\_ctc=25;



* Generate Info those candidates who are willing to join and the ECTC is 25% hike from their CTC joining time is less then 30 days and candidates who are ready to re-locate and joining bonus is offered.

select \* from hr\_hiring\_details join employee\_joining\_status using(candidate\_ref)

where status='Joined' and percent\_difference\_ctc=25 and notice\_period<30 and candidate\_relocate\_actual='Yes' and Joining\_bonus='Yes';



* Generate the count of the candidates who are hired through what source and also who have joined and declined the offer.

select candidate\_source,status, count(candidate\_ref) count from hr\_hiring\_details join employee\_joining\_status using (candidate\_ref) group by (candidate\_source,status) order by candidate\_source;

