UTD ID: 2021566387

Aashish Reddy Vundhyala

**Normalization**:

**CREATE AND INSERT STATEMENTS:**

Staff table:

create table staff(

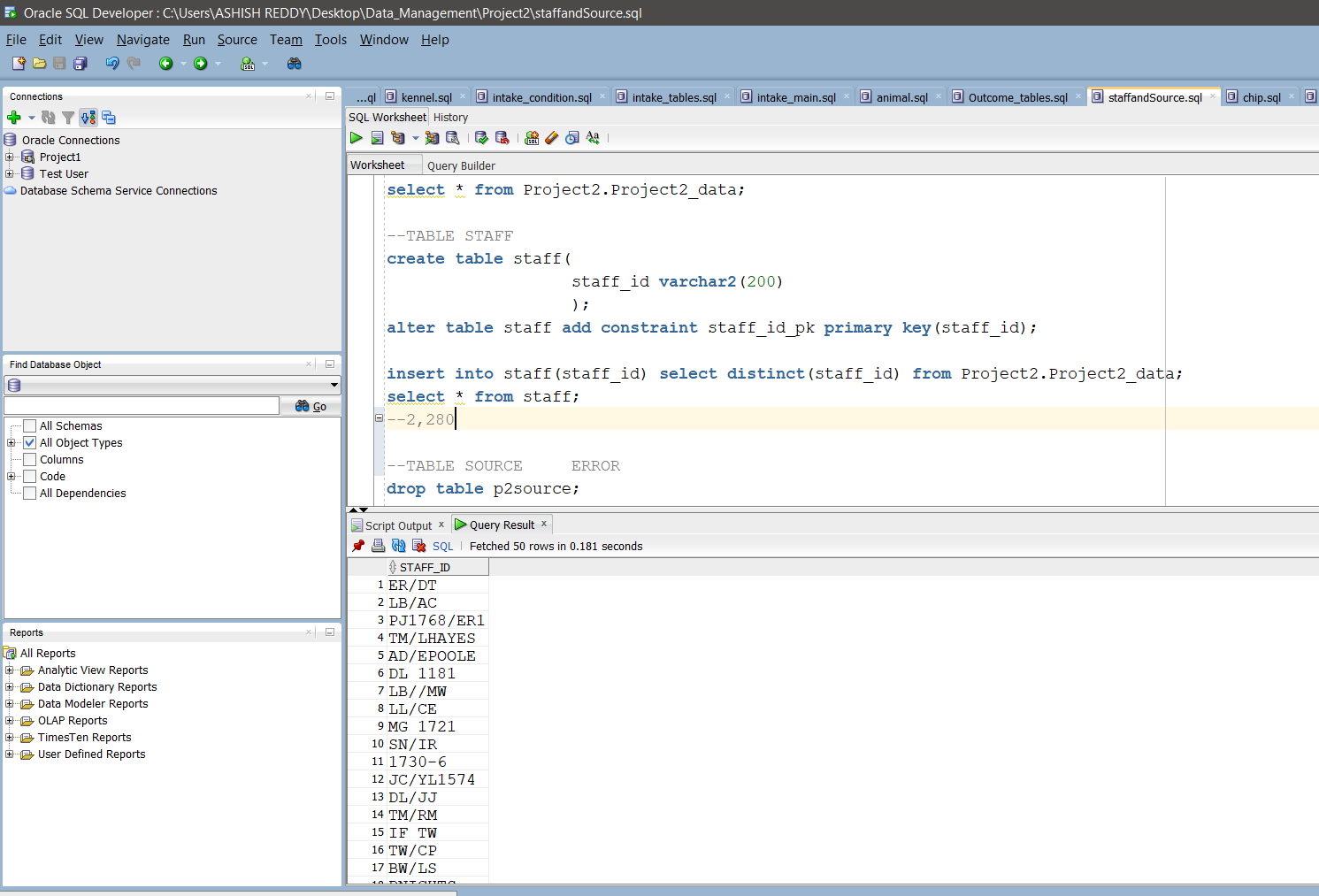
staff\_id varchar2(200)

);

alter table staff add constraint staff\_id\_pk primary key(staff\_id);

insert into staff(staff\_id) select distinct(staff\_id) from Project2.Project2\_data;

select \* from staff;



No.of Records: 2280

P2source:

drop table p2source;

create table p2source(

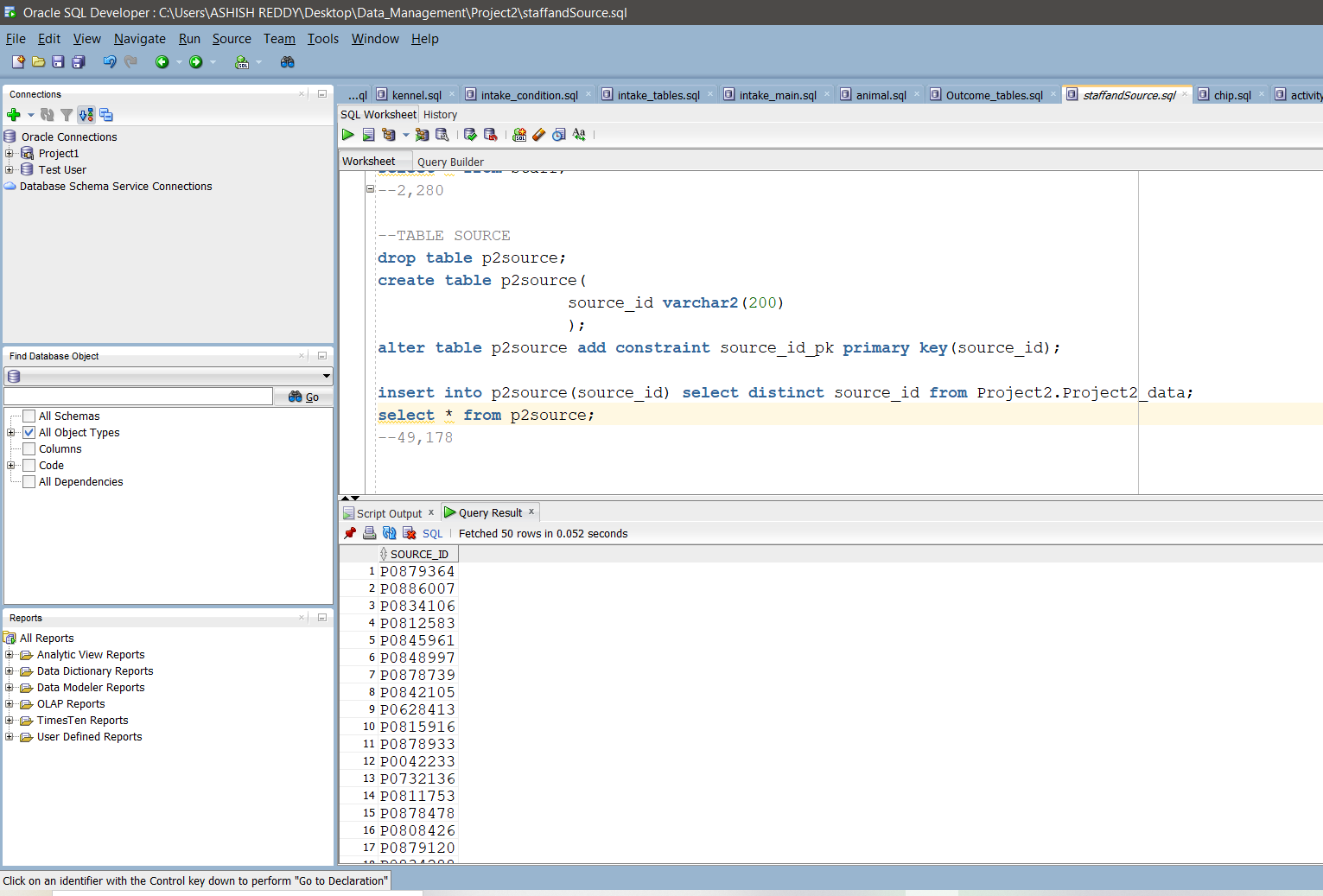
source\_id varchar2(200)

);

alter table p2source add constraint source\_id\_pk primary key(source\_id);

insert into p2source(source\_id) select distinct source\_id from Project2.Project2\_data;

select \* from p2source;



No.of Records:

49,178

chipStatus:

create table chipStatus(

chipstatus\_id number generated by default on null as identity,

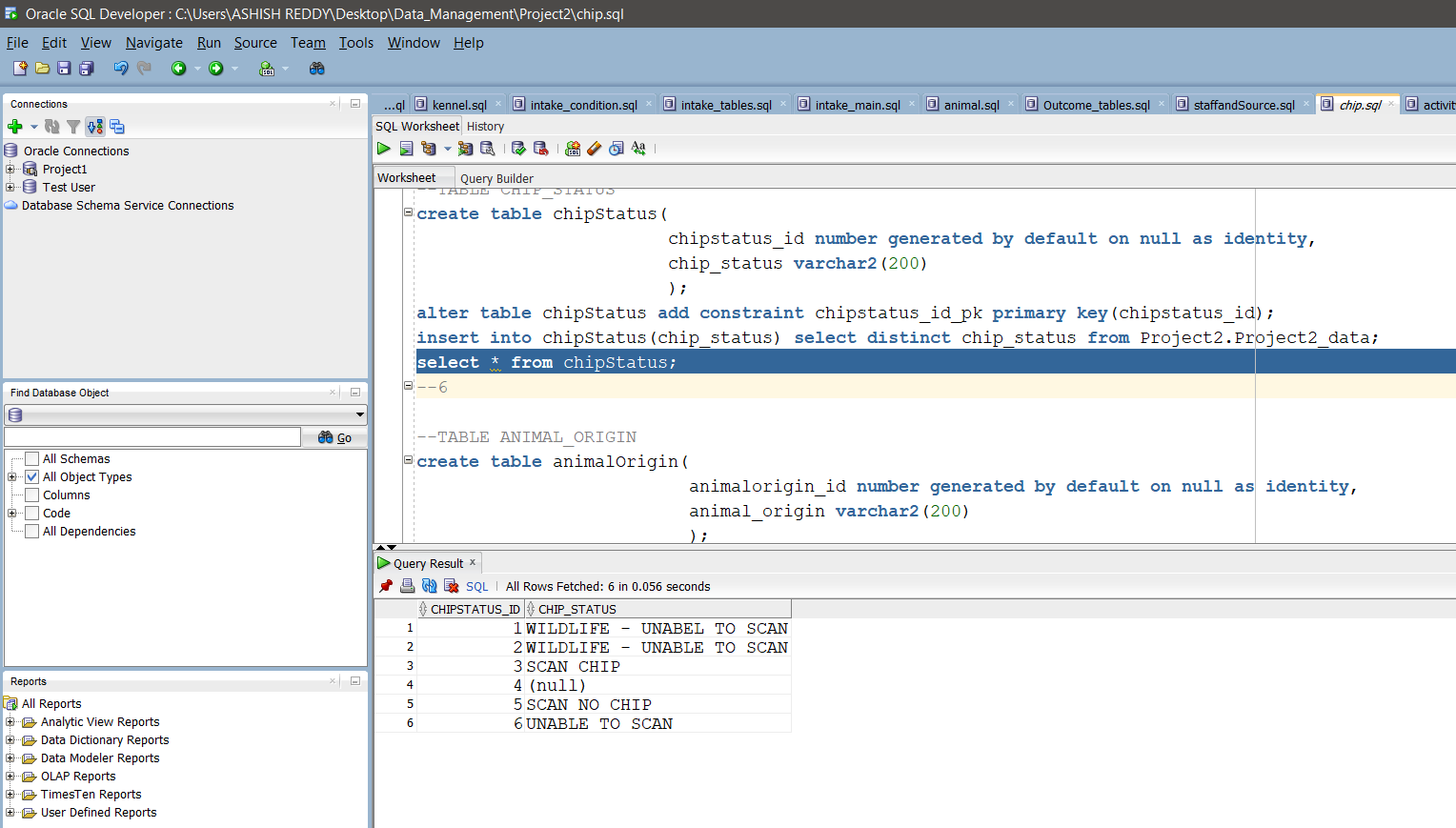
chip\_status varchar2(200)

);

alter table chipStatus add constraint chipstatus\_id\_pk primary key(chipstatus\_id);

insert into chipStatus(chip\_status) select distinct chip\_status from Project2.Project2\_data;

select \* from chipStatus;



No.of Records: 6

animalOrigin:

create table animalOrigin(

animalorigin\_id number generated by default on null as identity,

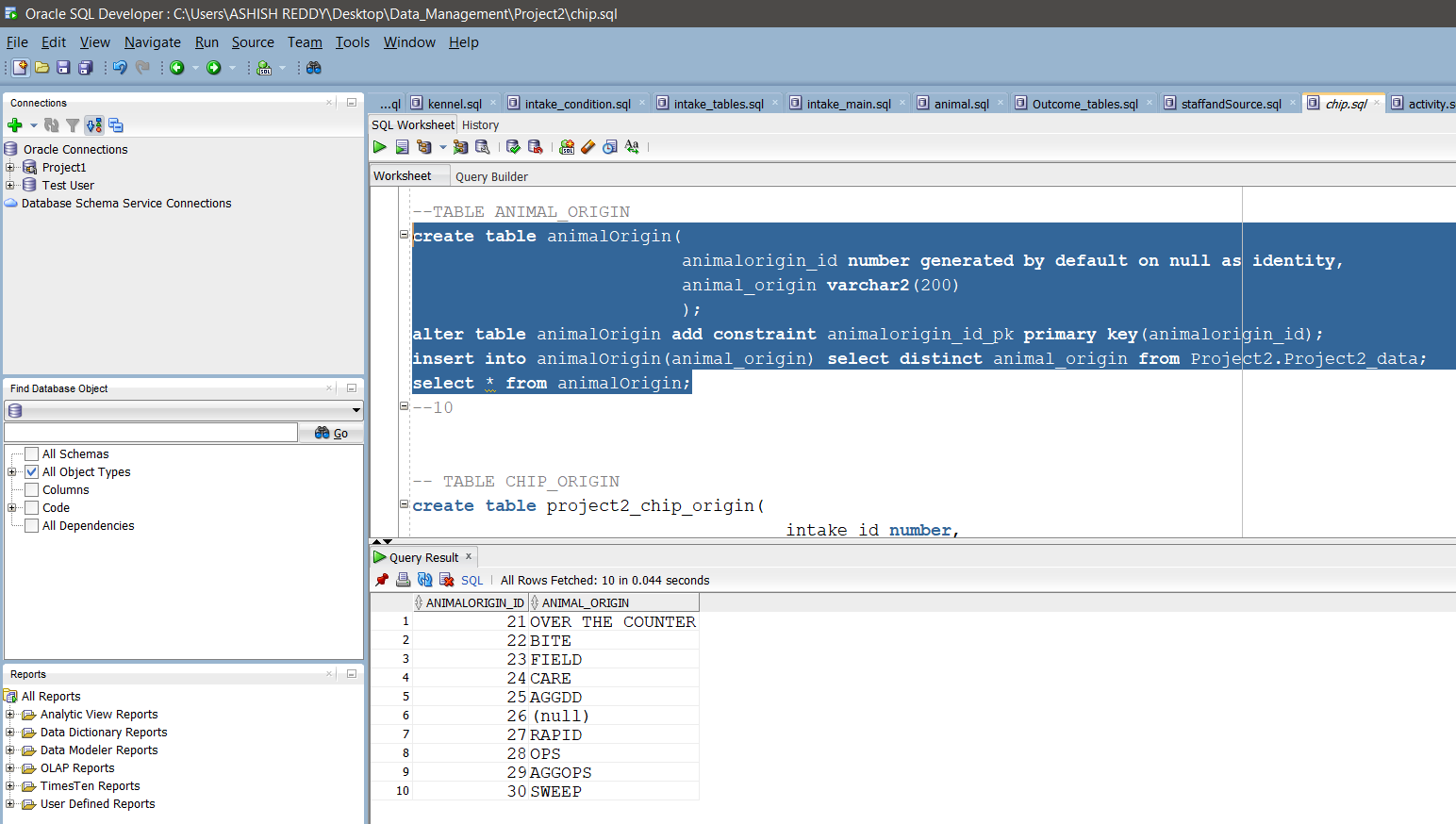
animal\_origin varchar2(200)

);

alter table animalOrigin add constraint animalorigin\_id\_pk primary key(animalorigin\_id);

insert into animalOrigin(animal\_origin) select distinct animal\_origin from Project2.Project2\_data;

select \* from animalOrigin;



No.of Records: 10

Activity:

create table activity(

activity\_id number generated by default on null as identity,

activity\_number\_beginning varchar2(200),

activity\_number\_end NUMBER

);

alter table activity add constraint activity\_id\_pk primary key(activity\_id);

insert into activity(activity\_number\_beginning, activity\_number\_end)

select

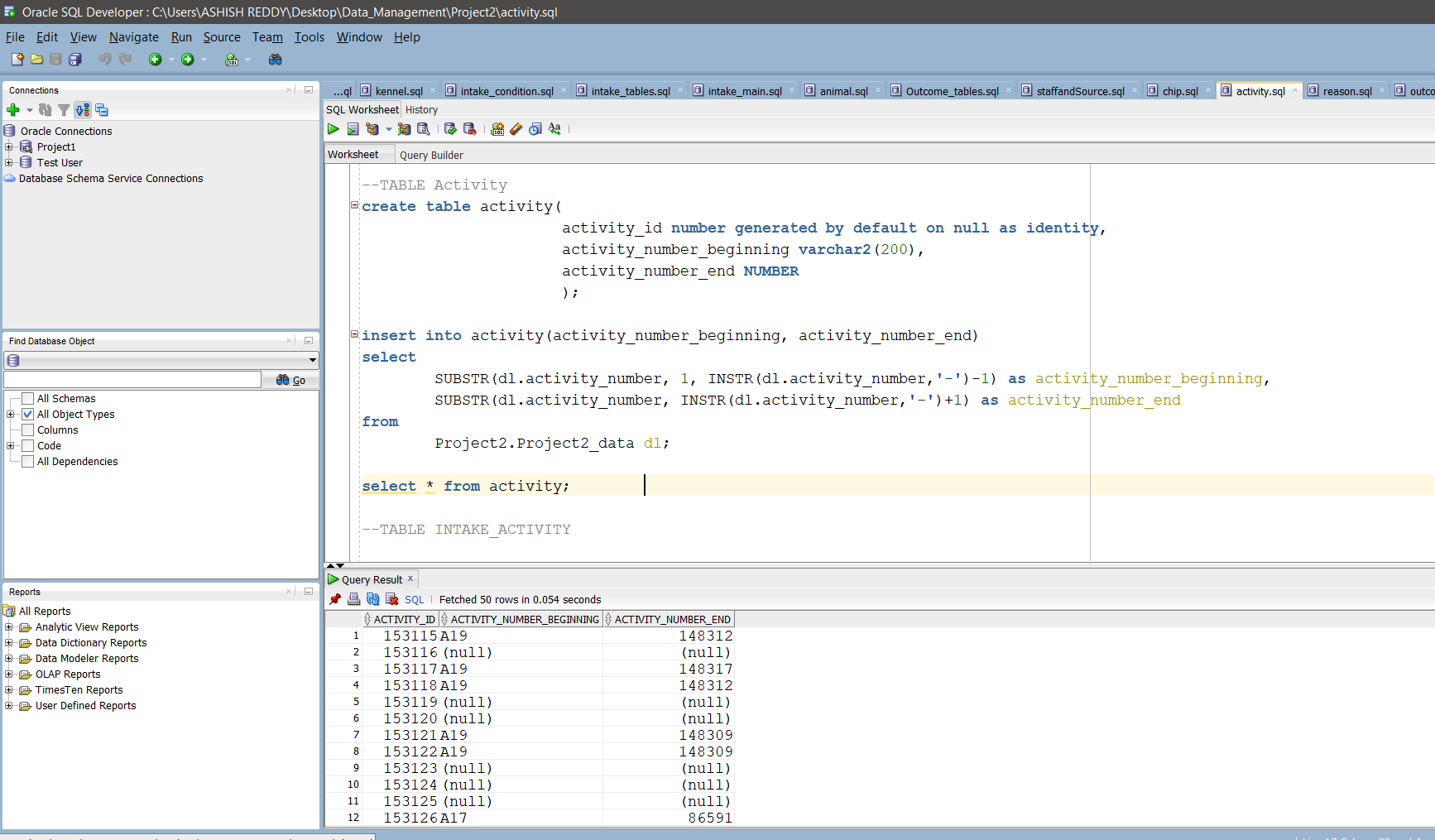
SUBSTR(dl.activity\_number, 1, INSTR(dl.activity\_number,'-')-1) as activity\_number\_beginning,

SUBSTR(dl.activity\_number, INSTR(dl.activity\_number,'-')+1) as activity\_number\_end

from

Project2.Project2\_data dl;

select \* from activity;



No.of Records: 135,234

P2Impound:

drop table p2impound;

create table p2impound(

impound\_id number generated by default on null as identity,

impound\_number\_beginning varchar2(20),

impound\_number\_end varchar2(20)

);

alter table p2impound

add constraint impound\_id\_pk primary key(impound\_id);

insert into p2impound(impound\_number\_beginning,impound\_number\_end)

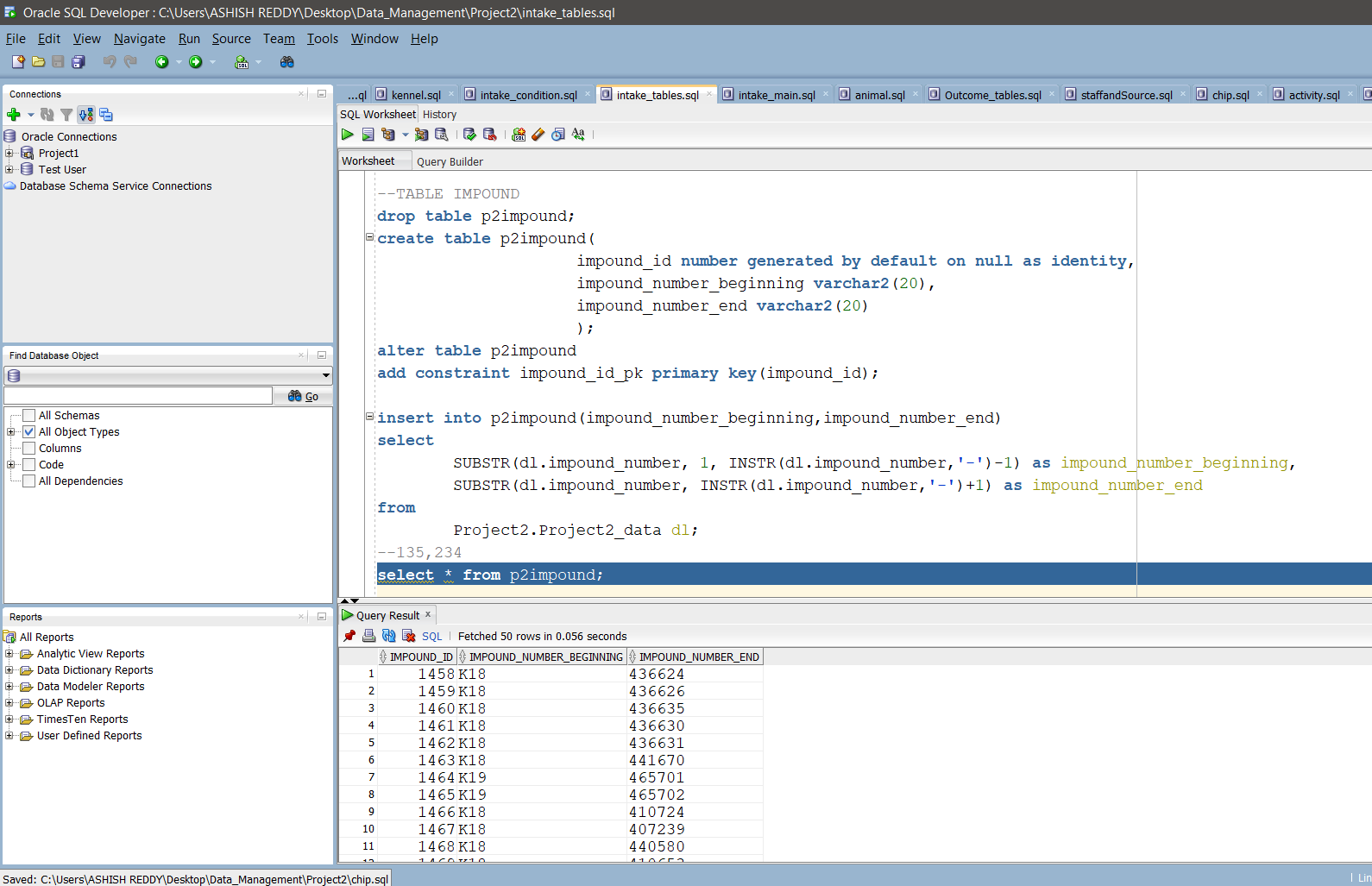
select

SUBSTR(dl.impound\_number, 1, INSTR(dl.impound\_number,'-')-1) as impound\_number\_beginning,

SUBSTR(dl.impound\_number, INSTR(dl.impound\_number,'-')+1) as impound\_number\_end

from

Project2.Project2\_data dl;



No.of Records: 135,234

Kennel:

drop table kennel;

create table kennel (

kennel\_id number generated by default on null as identity,

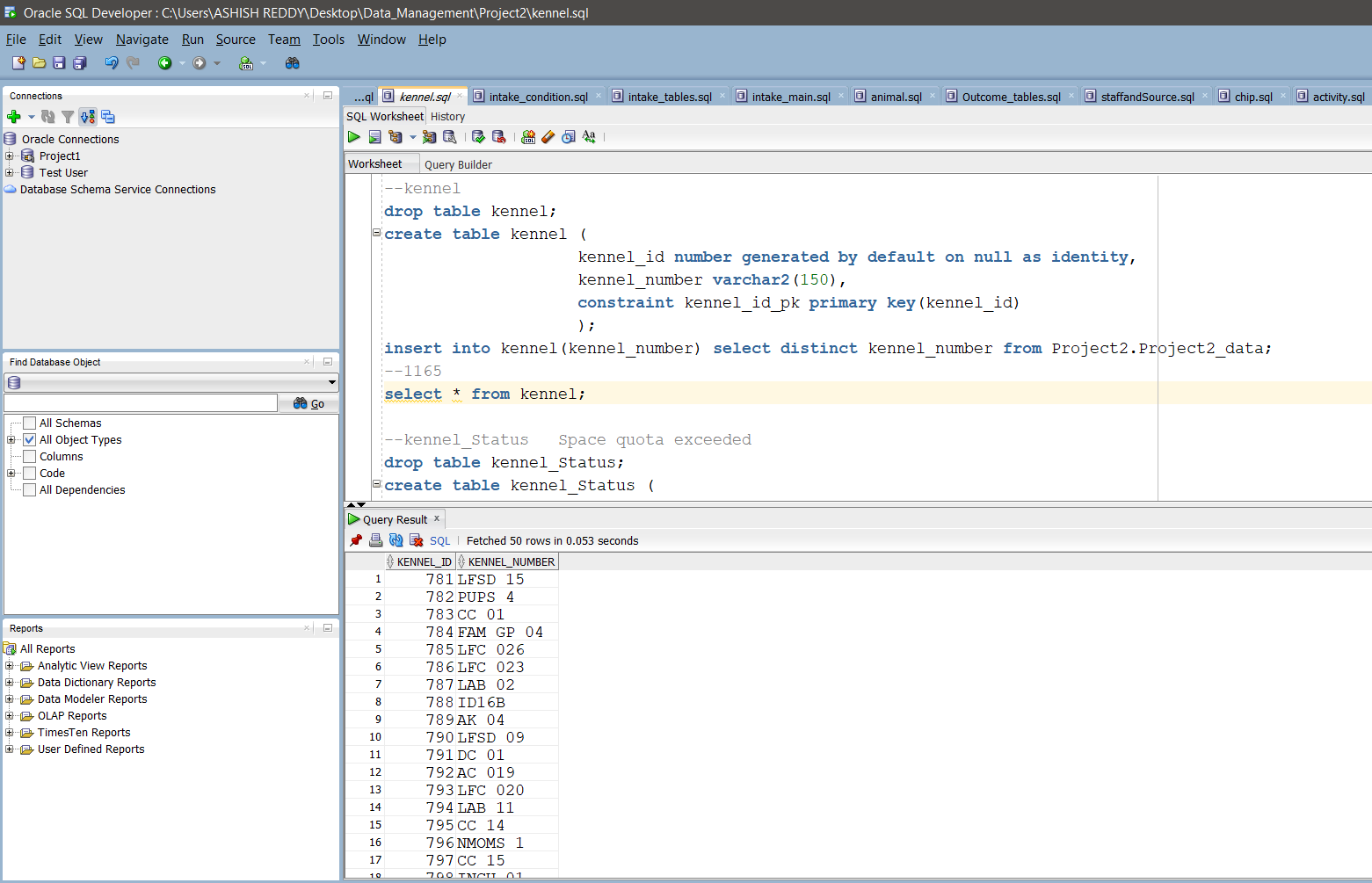
kennel\_number varchar2(150),

constraint kennel\_id\_pk primary key(kennel\_id)

);

alter table kennel add constraint kennel\_id\_pk primary key(kennel\_id);

insert into kennel(kennel\_number) select distinct kennel\_number from Project2.Project2\_data;



No.of Records: 1165

Kennel\_Status:

drop table kennel\_Status;

create table kennel\_Status (

status\_id number generated by default on null as identity,

kennel\_status varchar(150),

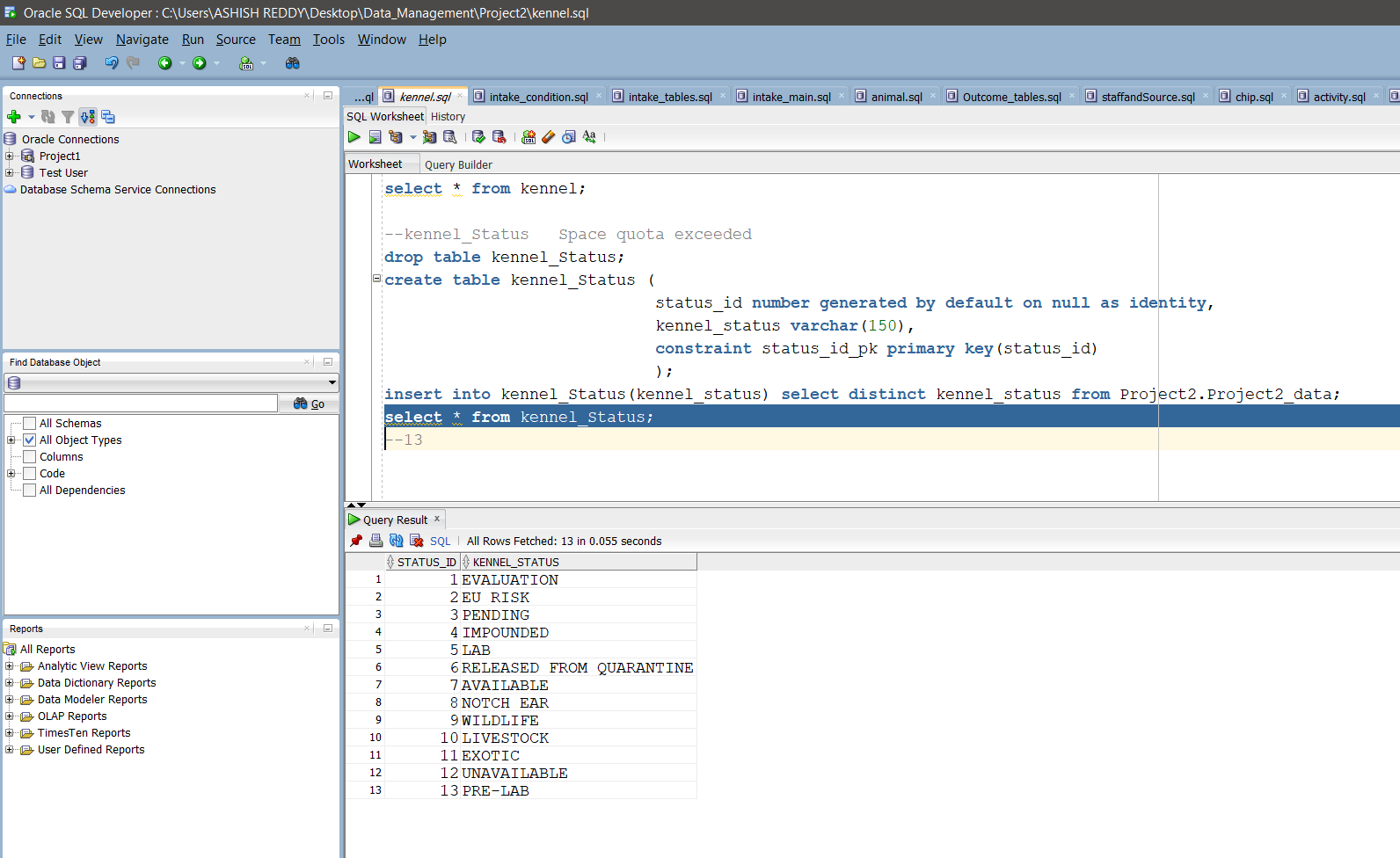
constraint status\_id\_pk primary key(status\_id)

);

alter table kennel\_Status add constraint status\_id\_pk primary key(status\_id);

insert into kennel\_Status(kennel\_status) select distinct kennel\_status from Project2.Project2\_data;

select \* from kennel\_Status;



No.of Records: 13

intakeType:

create table intakeType(

intaketype\_id number generated by default on null as identity,

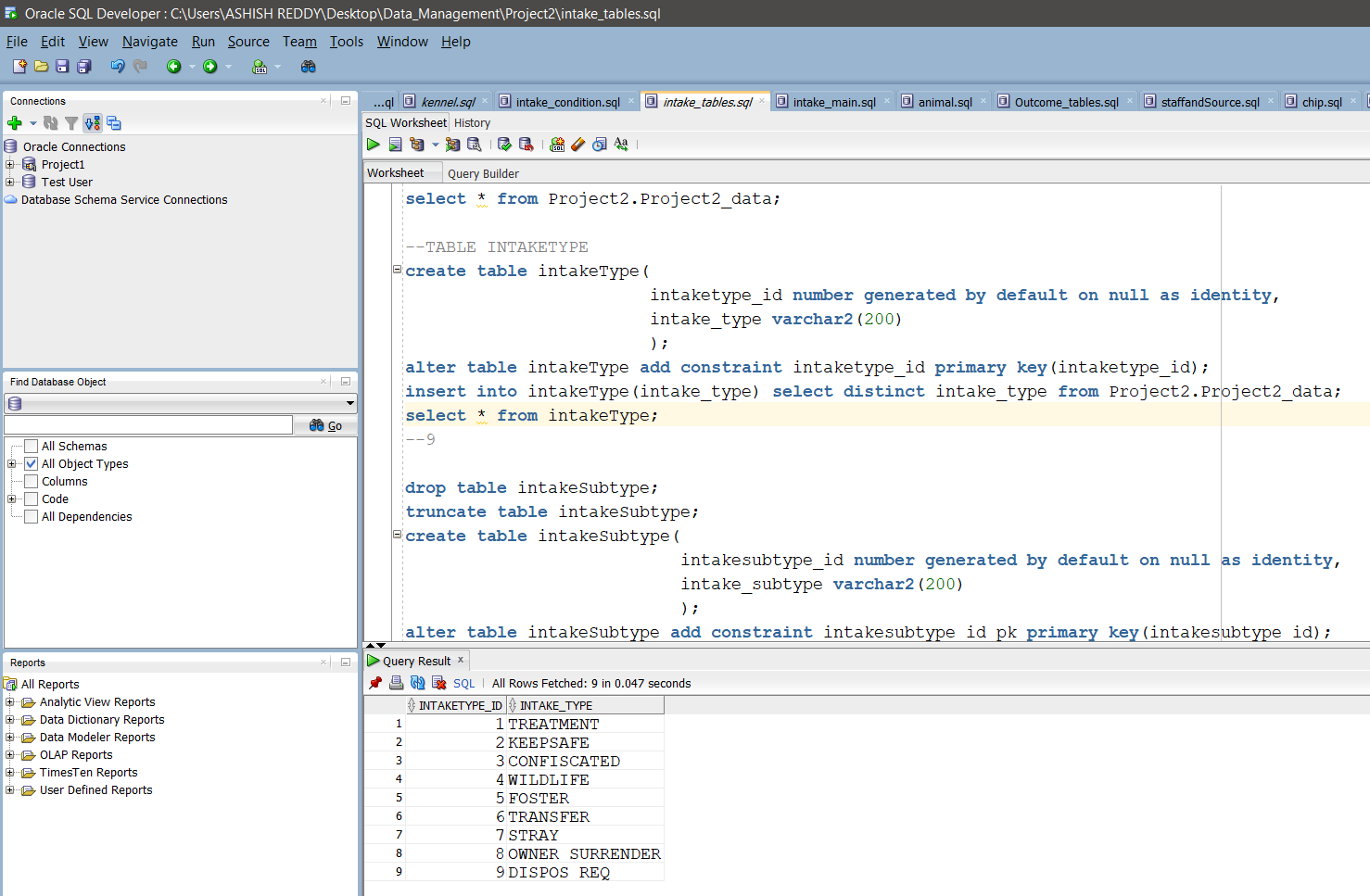
intake\_type varchar2(200)

);

alter table intakeType add constraint intaketype\_id primary key(intaketype\_id);

insert into intakeType(intake\_type) select distinct intake\_type from Project2.Project2\_data;

select \* from intakeType;



No.of Records: 9

intakeSubtype:

create table intakeSubtype(

intakesubtype\_id number generated by default on null as identity,

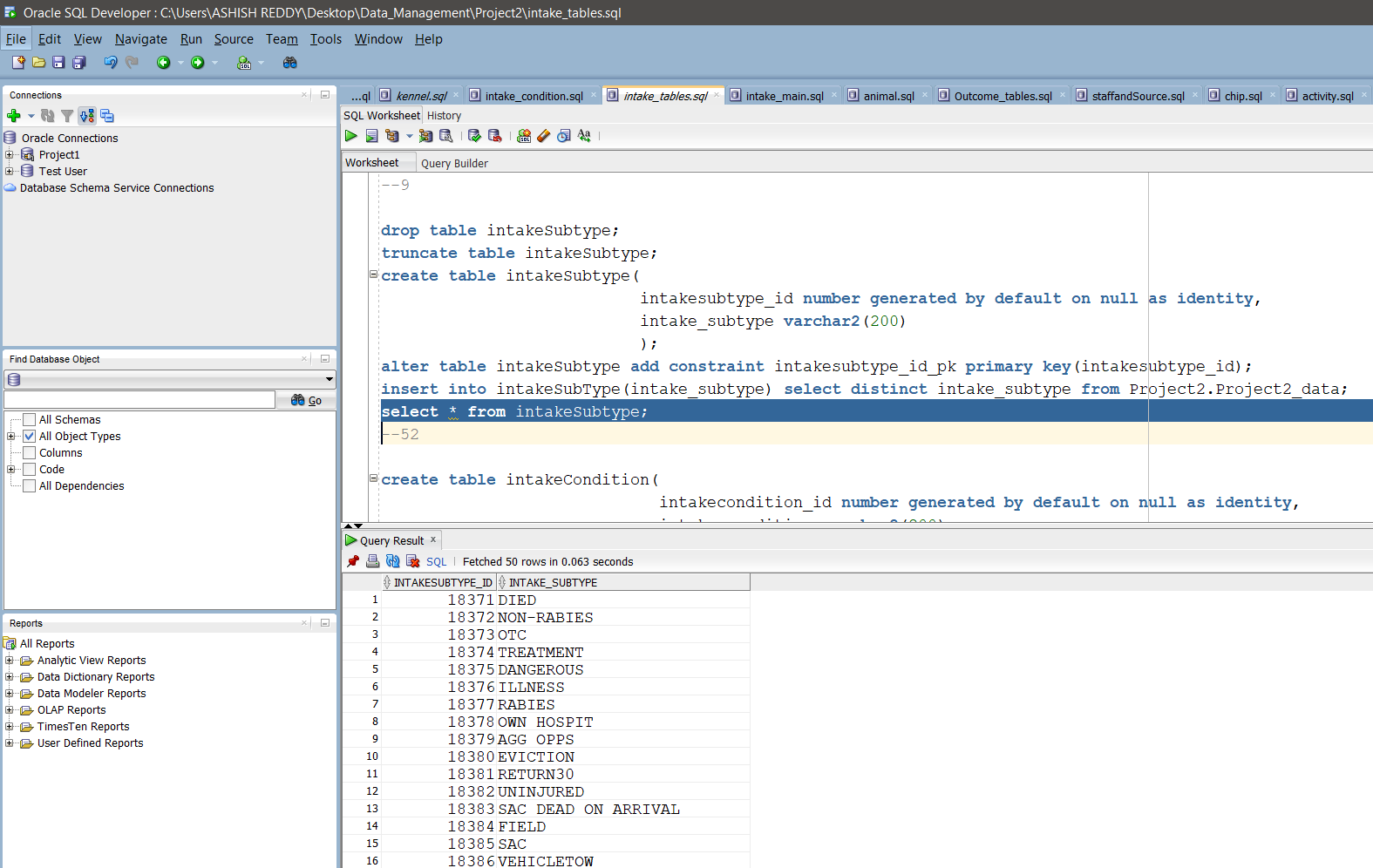
intake\_subtype varchar2(200)

);

alter table intakeSubtype add constraint intakesubtype\_id\_pk primary key(intakesubtype\_id);

insert into intakeSubType(intake\_subtype) select distinct intake\_subtype from Project2.Project2\_data;

select \* from intakeSubtype;



No.of Records: 52

intakeCondition:

create table intakeCondition(

intakecondition\_id number generated by default on null as identity,

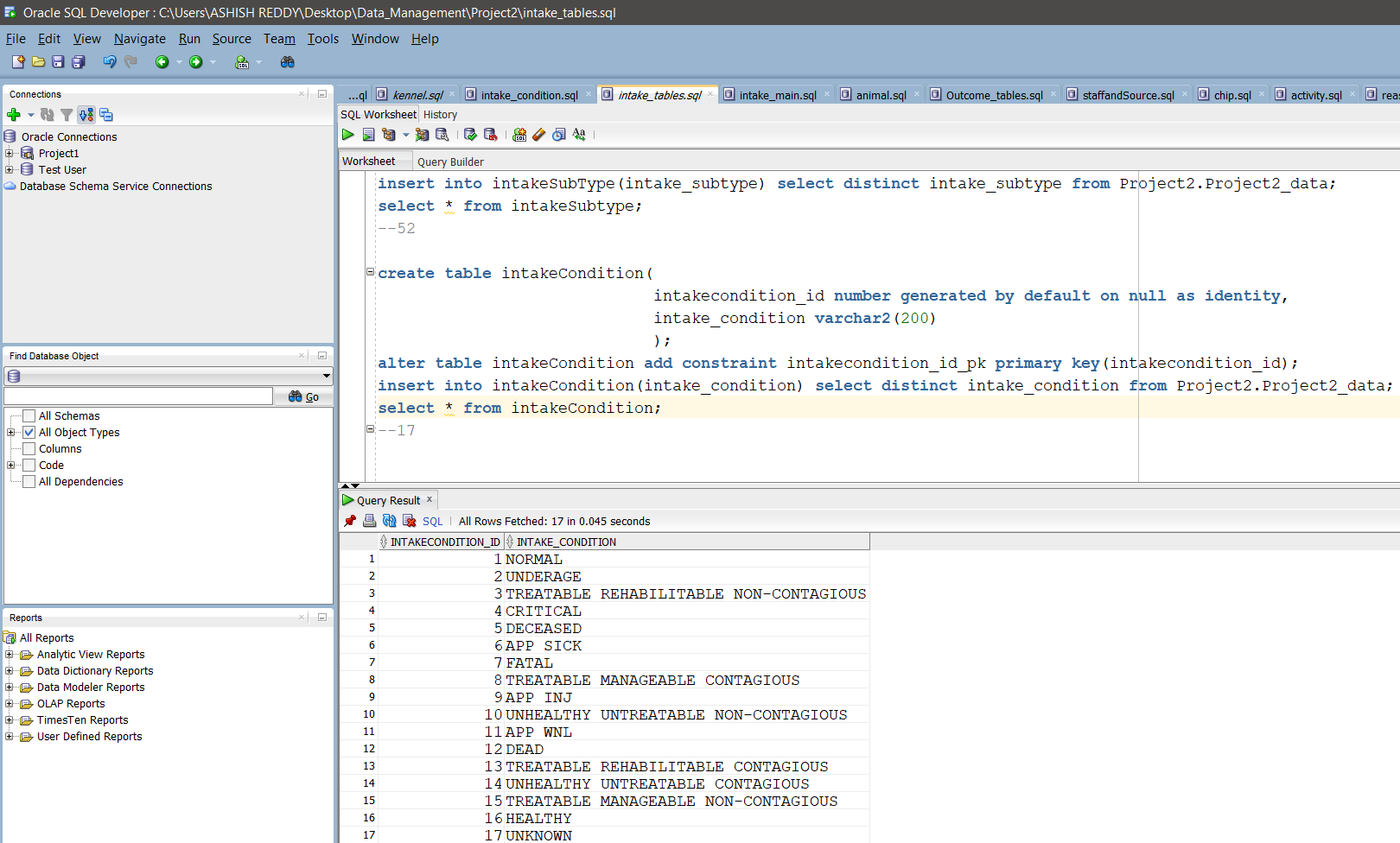
intake\_condition varchar2(200)

);

alter table intakeCondition add constraint intakecondition\_id\_pk primary key(intakecondition\_id);

insert into intakeCondition(intake\_condition) select distinct intake\_condition from Project2.Project2\_data;

select \* from intakeCondition;



No.of Records: 17

animalType:

drop table animalType;

create table animalType (

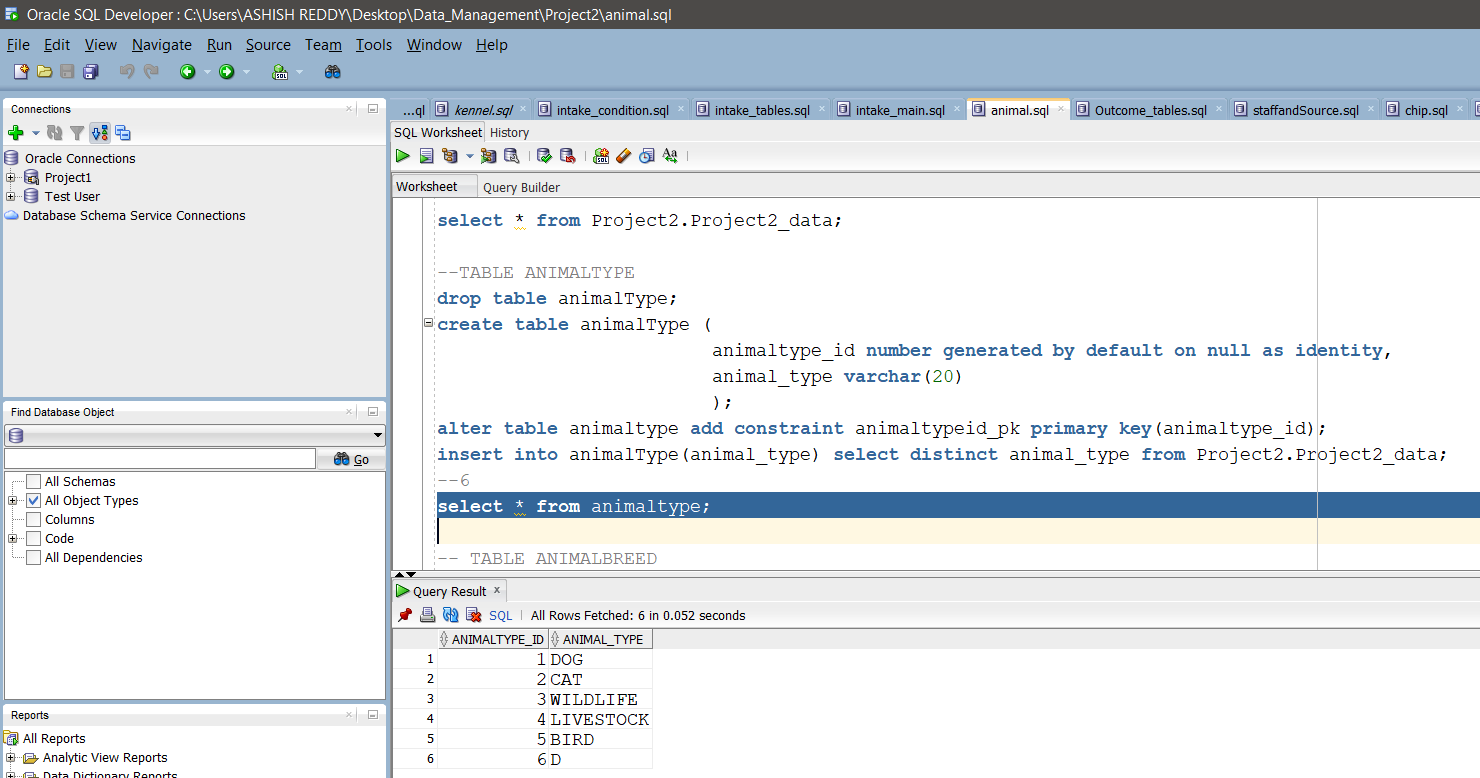
animaltype\_id number generated by default on null as identity,

animal\_type varchar(20)

);

alter table animaltype add constraint animaltypeid\_pk primary key(animaltype\_id);

insert into animalType(animal\_type) select distinct animal\_type from Project2.Project2\_data;



No.of Records: 6

animalBreed:

drop table animalBreed;

CREATE TABLE animalBreed(

breed\_id number generated by default on null as identity,

animal\_breed varchar2(200)

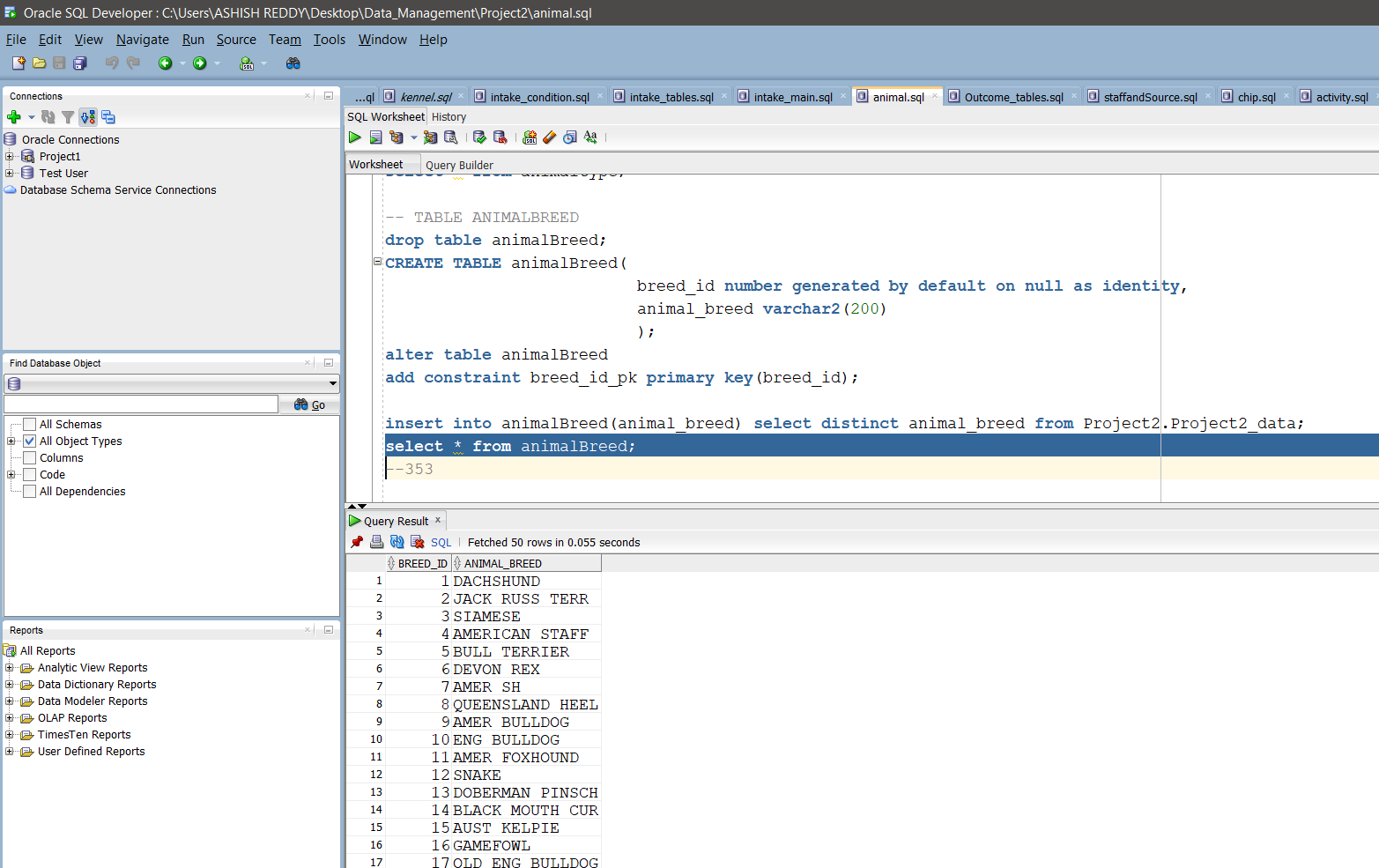
);

alter table animalBreed

add constraint breed\_id\_pk primary key(breed\_id);

insert into animalBreed(animal\_breed) select distinct animal\_breed from Project2.Project2\_data;

select \* from animalBreed;



No.of Records: 353

animalOrigin:

create table animalOrigin(

animalorigin\_id number generated by default on null as identity,

animal\_origin varchar2(200)

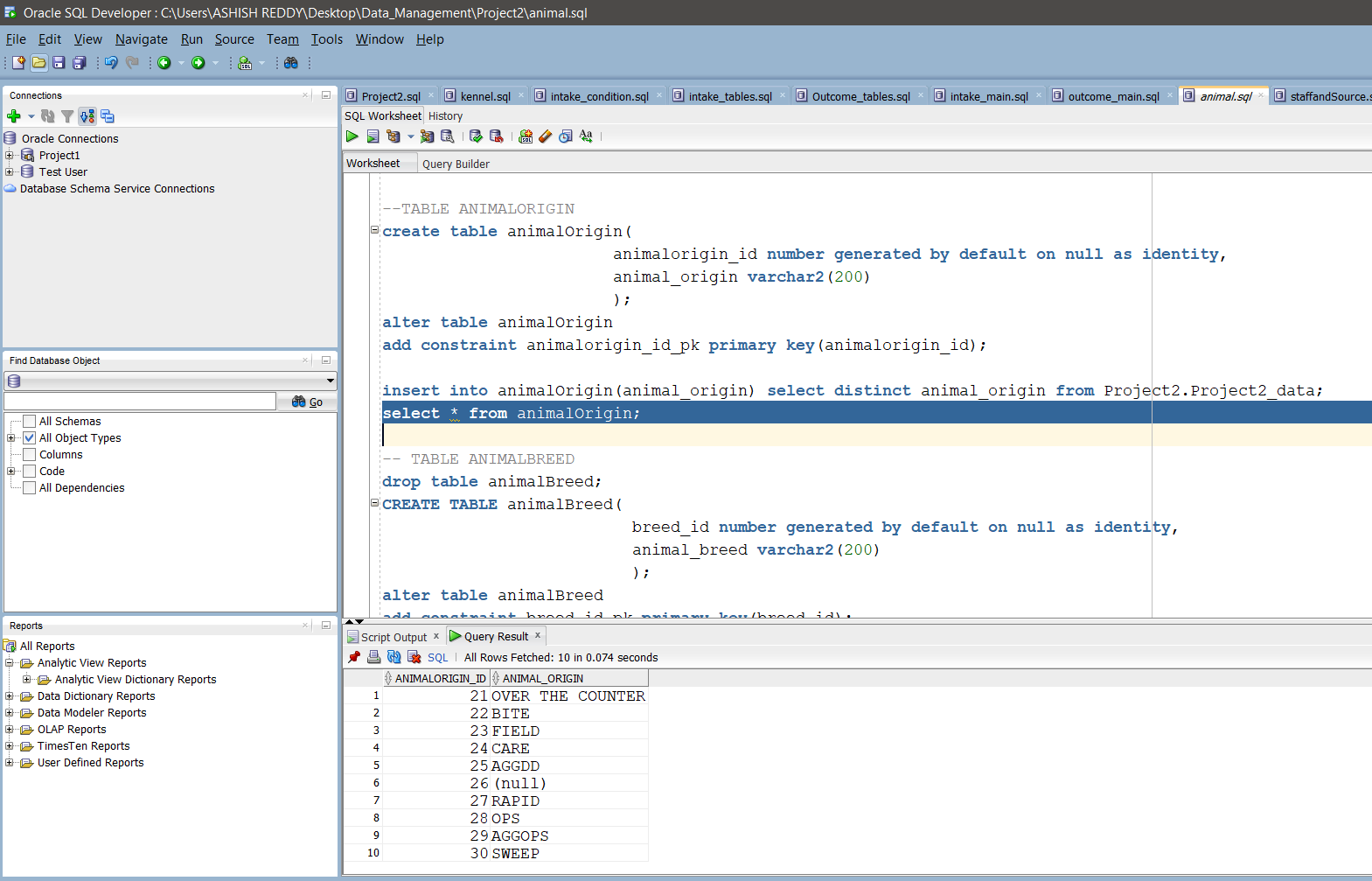
);

alter table animalOrigin

add constraint animalorigin\_id\_pk primary key(animalorigin\_id);

insert into animalOrigin(animal\_origin) select distinct animal\_origin from Project2.Project2\_data;

select \* from animalOrigin;



No.of Records: 10

animalCensus:

create table animalCensus(

animal\_id varchar2(200),

census\_tract varchar2(200),

council\_district varchar2(200),

month varchar2(200),

year varchar2(200)

);

alter table animalCensus

add constraint animal\_idd\_pk primary key (animal\_id);

alter table animalCensus

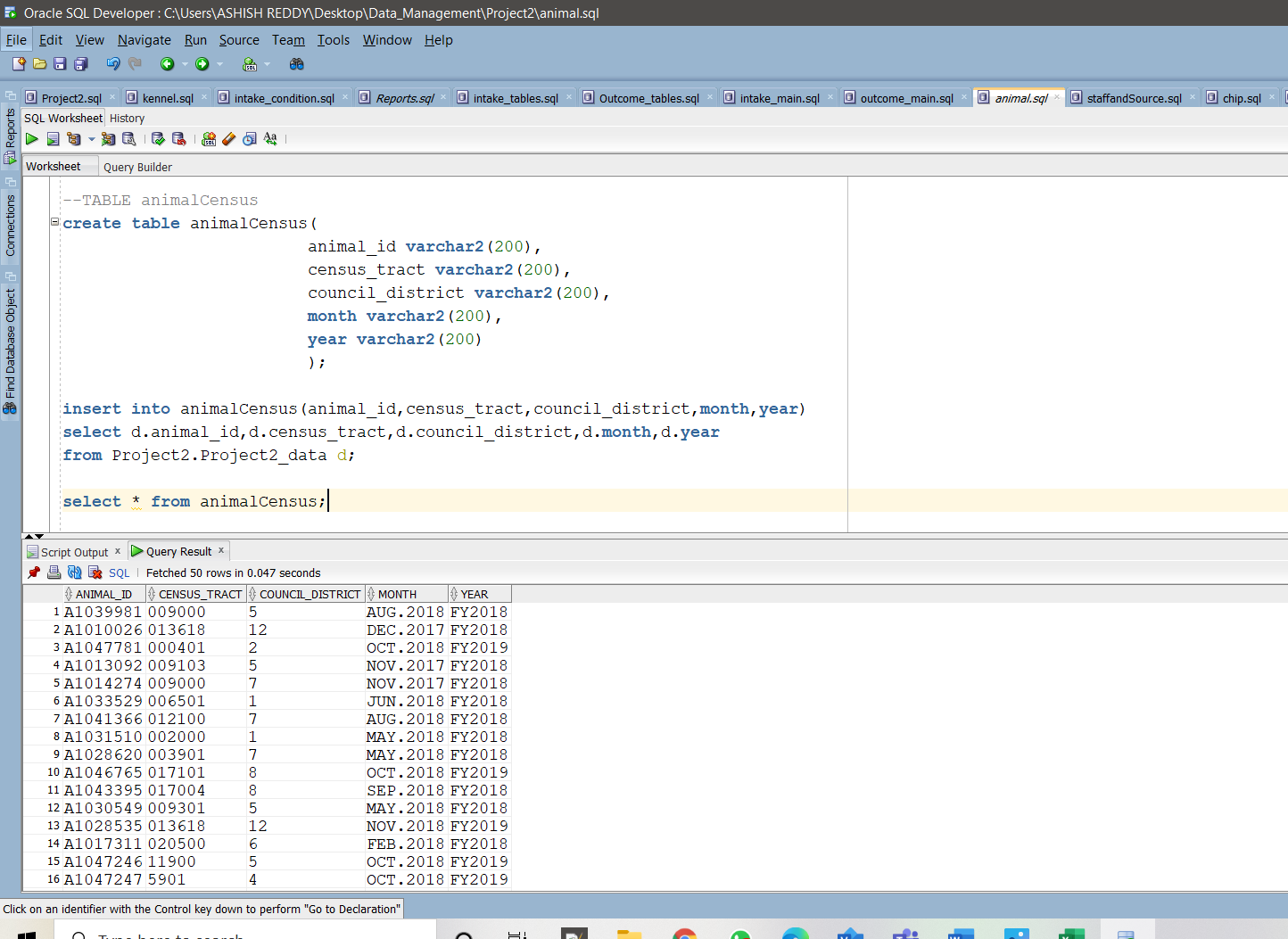
add constraint animal\_idd\_fk foreign key(animal\_id) references animal(animal\_id);

insert into animalCensus(animal\_id,census\_tract,council\_district,month,year)

select d.animal\_id,d.census\_tract,d.council\_district,d.month,d.year

from Project2.Project2\_data d;

select \* from animalCensus;



No.of Records: 135234

outcomeType:

create table outcomeType(

outcometype\_id number generated by default on null as identity,

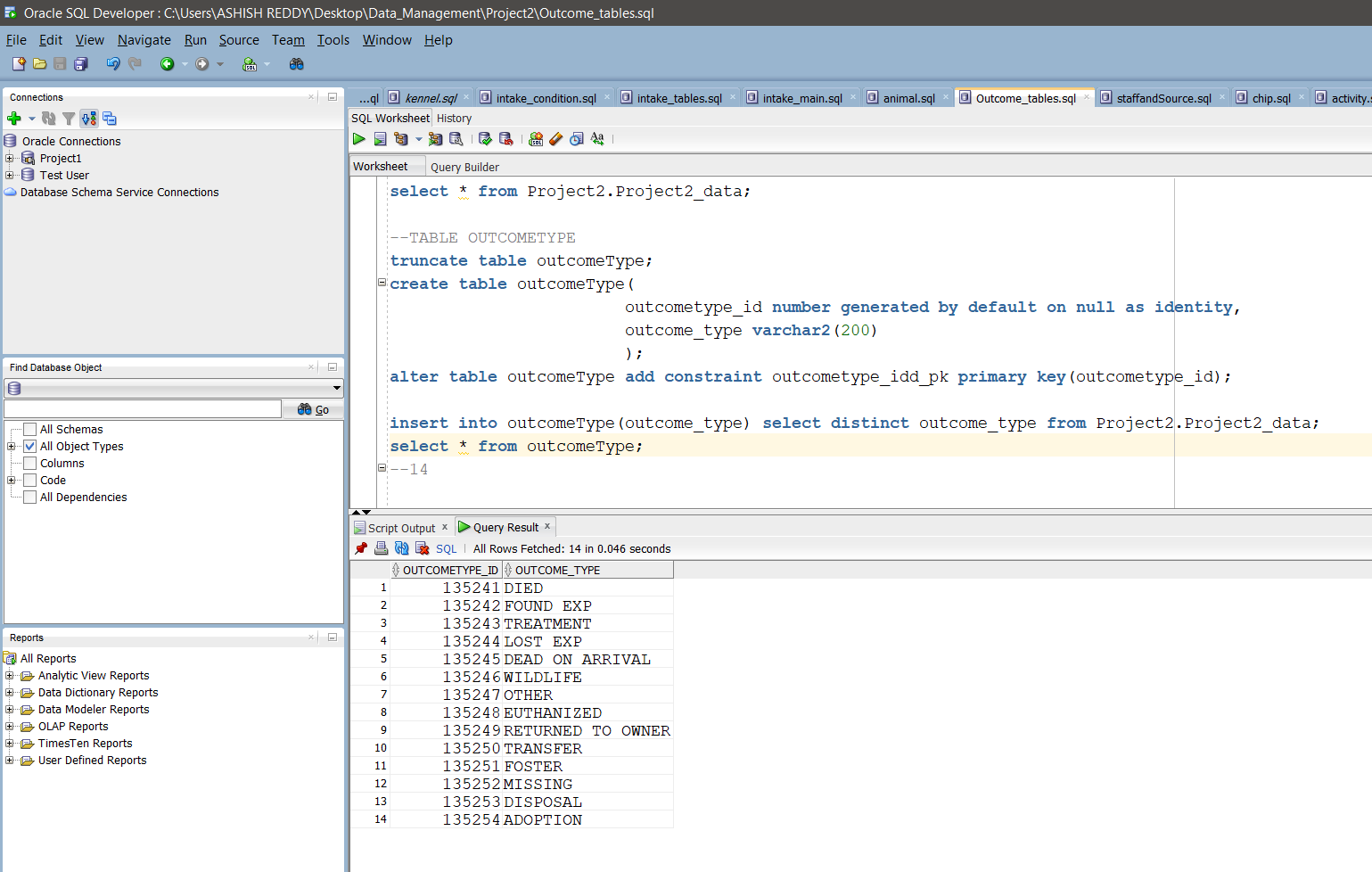
outcome\_type varchar2(200)

);

alter table outcomeType add constraint outcometype\_id\_pk primary key(outcometype\_id);

insert into outcomeType(outcome\_type) select outcome\_type from Project2.Project2\_data;

select \* from outcomeType;



No.of Records: 14

outcomeSubtype:

create table outcomeSubtype(

outcomesubtype\_id number generated by default on null as identity,

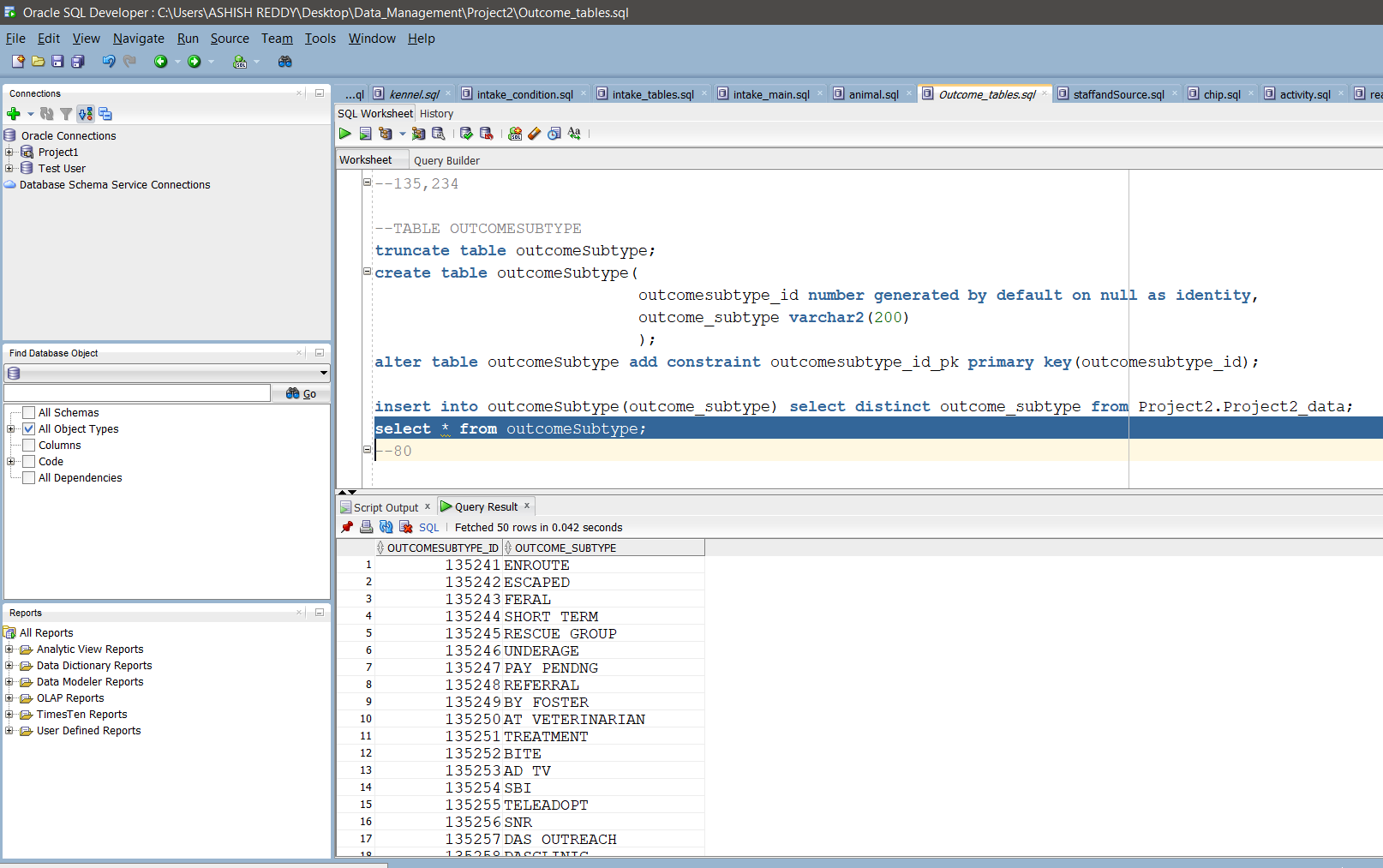
outcome\_subtype varchar2(200)

);

alter table outcomeSubtype add constraint outcomesubtype\_id\_pk primary key(outcomesubtype\_id);

insert into outcomeSubtype(outcome\_subtype) select outcome\_subtype from Project2.Project2\_data;

select \* from outcomeSubtype;



No.of Records: 80

outcomeCondition:

create table outcomeCondition(

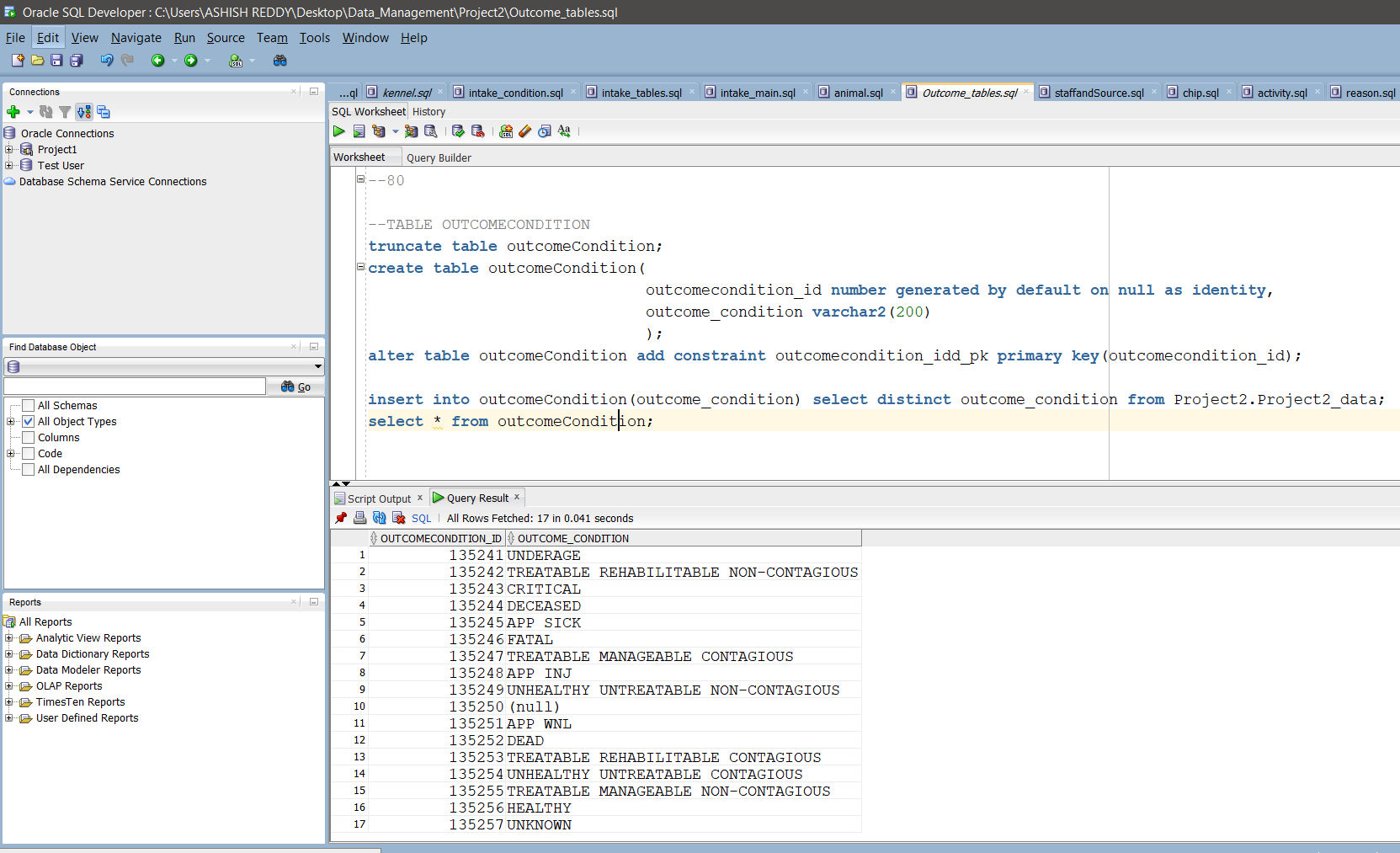
outcomecondition\_id number generated by default on null as identity,

outcome\_condition varchar2(200)

);

alter table outcomeCondition add constraint outcomecondition\_idd\_pk primary key(outcomecondition\_id);

insert into outcomeCondition(outcome\_condition) select distinct outcome\_condition from Project2.Project2\_data;

select \* from outcomeCondition; 

No.of Records: 17

Reason:

drop table reason;

create table reason(

reason\_id number generated by default on null as identity,

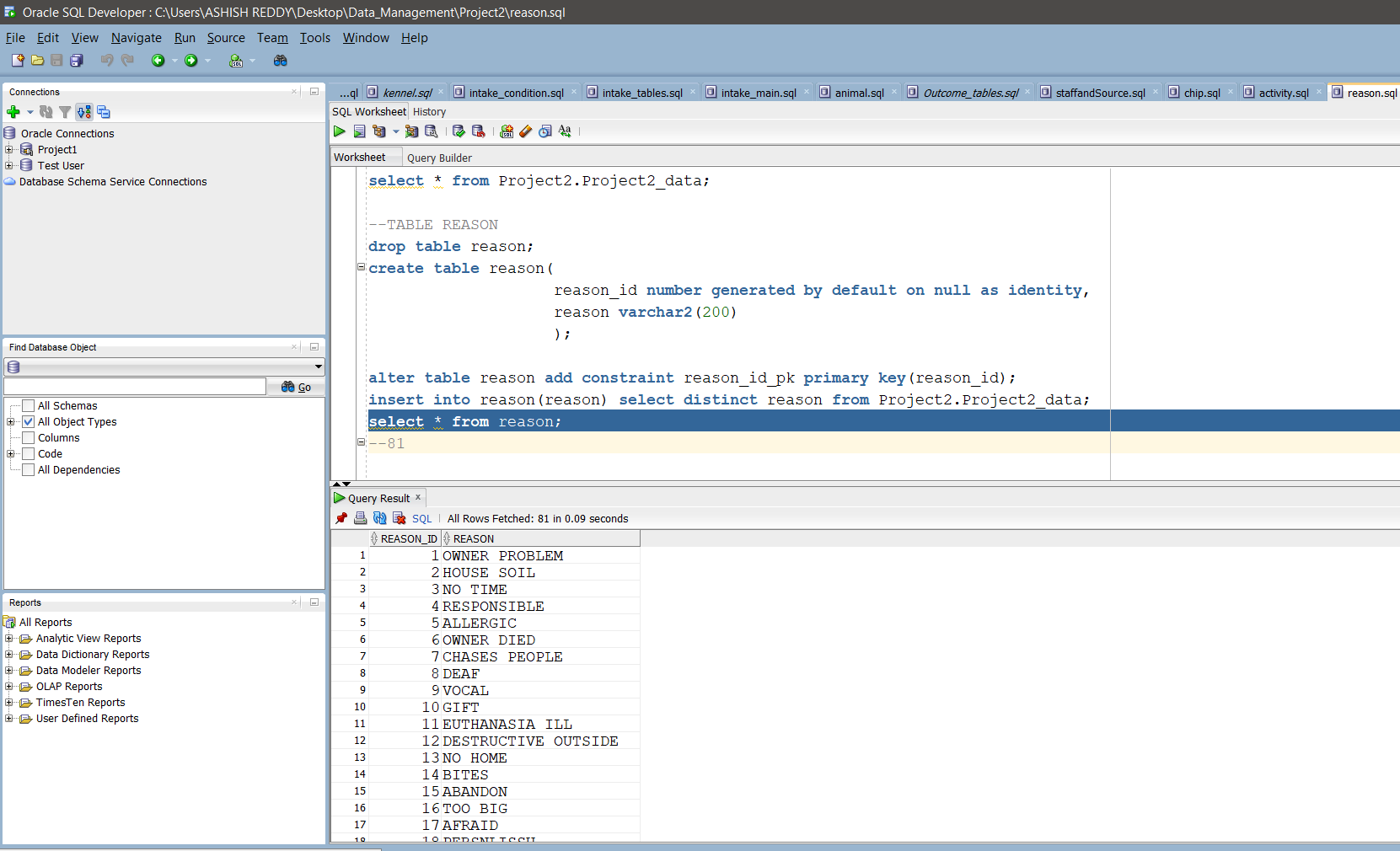
reason varchar2(200)

);

alter table reason add constraint reason\_id\_pk primary key(reason\_id);

insert into reason(reason) select distinct reason from Project2.Project2\_data;

select \* from reason;



No.of Records: 81

Animal:

drop table animal;

create table animal(

animal\_id varchar2(200),

breed\_id number,

type\_id number

);

alter table animal

add constraint animal\_id\_pk primary key(animal\_id);

alter table animal

add constraint breed\_id\_fk foreign key(breed\_id) references animalBreed(breed\_id);

alter table animal

add constraint type\_id\_fkk foreign key(type\_id) references animalType(animaltype\_id);

select count(animal\_id) from animal;

insert into animal(animal\_id,type\_id,breed\_id)

select cc.animal\_id,tt.animaltype\_id,bb.breed\_id

from

(select distinct aa.animal\_id,aa.animal\_type,bb.animal\_breed

from

(

(select animal\_id,animal\_type,max(to\_date(substr(intake\_date,1,10),'MM-DD-YYYY')) as min\_intake\_date

from project2\_data\_load

group by animal\_id,animal\_type)aa

inner join

(select animal\_id,animal\_type,animal\_breed,to\_date(substr(intake\_date,1,10),'MM-DD-YYYY') as intake\_date

from project2\_data\_load)bb

on aa.animal\_id = bb.animal\_id

and aa.animal\_type=bb.animal\_type

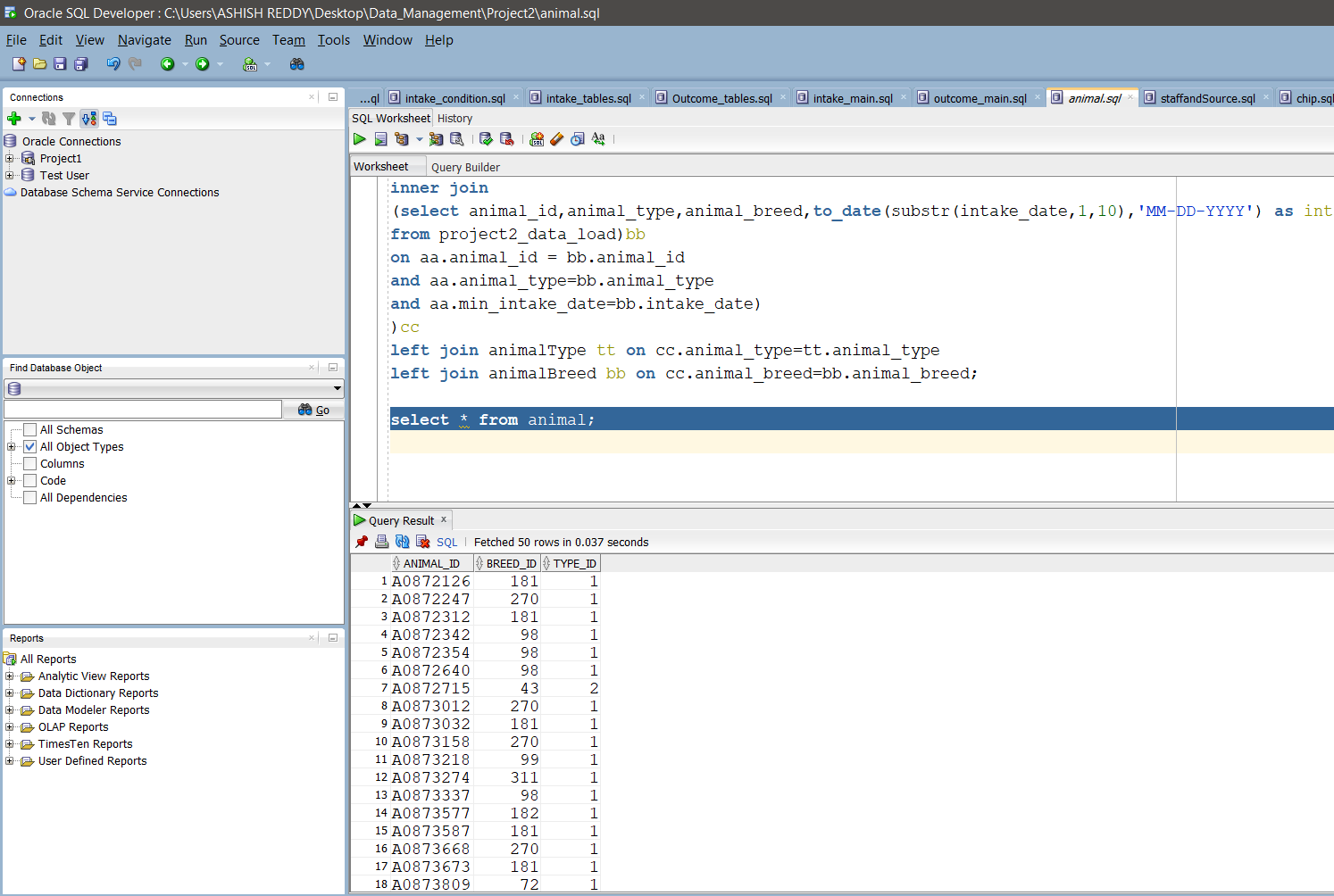
and aa.min\_intake\_date=bb.intake\_date)

)cc

left join animalType tt on cc.animal\_type=tt.animal\_type

left join animalBreed bb on cc.animal\_breed=bb.animal\_breed;

select \* from animal;



Intake:

truncate table intake;

create table intake(

intake\_id number generated by default on null as identity,

intaketype\_id number,

intakesubtype\_id number,

impound\_id number,

animal\_id varchar2(200),

source\_id varchar2(200),

staff\_id varchar2(200),

intake\_date varchar2(200),

intake\_time varchar2(200)

);

alter table intake

add (

constraint intake\_id primary key(intake\_id),

constraint animal\_id\_fk foreign key(animal\_id) references animal(animal\_id),

constraint impound\_id\_fk foreign key(impound\_id) references p2impound(impound\_id),

constraint intaketype\_id\_fk foreign key(intaketype\_id) references intakeType(intaketype\_id),

constraint intakesubtype\_id\_fk foreign key(intakesubtype\_id) references intakeSubtype(intakesubtype\_id),

constraint source\_id\_fk foreign key(source\_id) references p2source(source\_id),

constraint staff\_id\_fk foreign key(staff\_id) references staff(staff\_id),

constraint condition\_id\_fk foreign key(condition\_id) references p2intake\_condition(condition\_id)

);

insert into intake(animal\_id, impound\_id, intaketype\_id, intakesubtype\_id,source\_id,

staff\_id,intake\_date, intake\_time)

SELECT A.animal\_id, im.impound\_id, itt.intaketype\_id, iss.intakesubtype\_id,

S.source\_id,s1.staff\_id,TO\_DATE(substr(intake\_date, 1,10) ,'MM/DD/YYYY'),intake\_time

FROM project2.project2\_Data D

JOIN animal A ON D.animal\_id = A.animal\_id

JOIN p2impound im ON D.impound\_number = im.impound\_number\_beginning||'-'||im.impound\_number\_end

JOIN intakeType itt ON D.intake\_type = itt.intake\_type

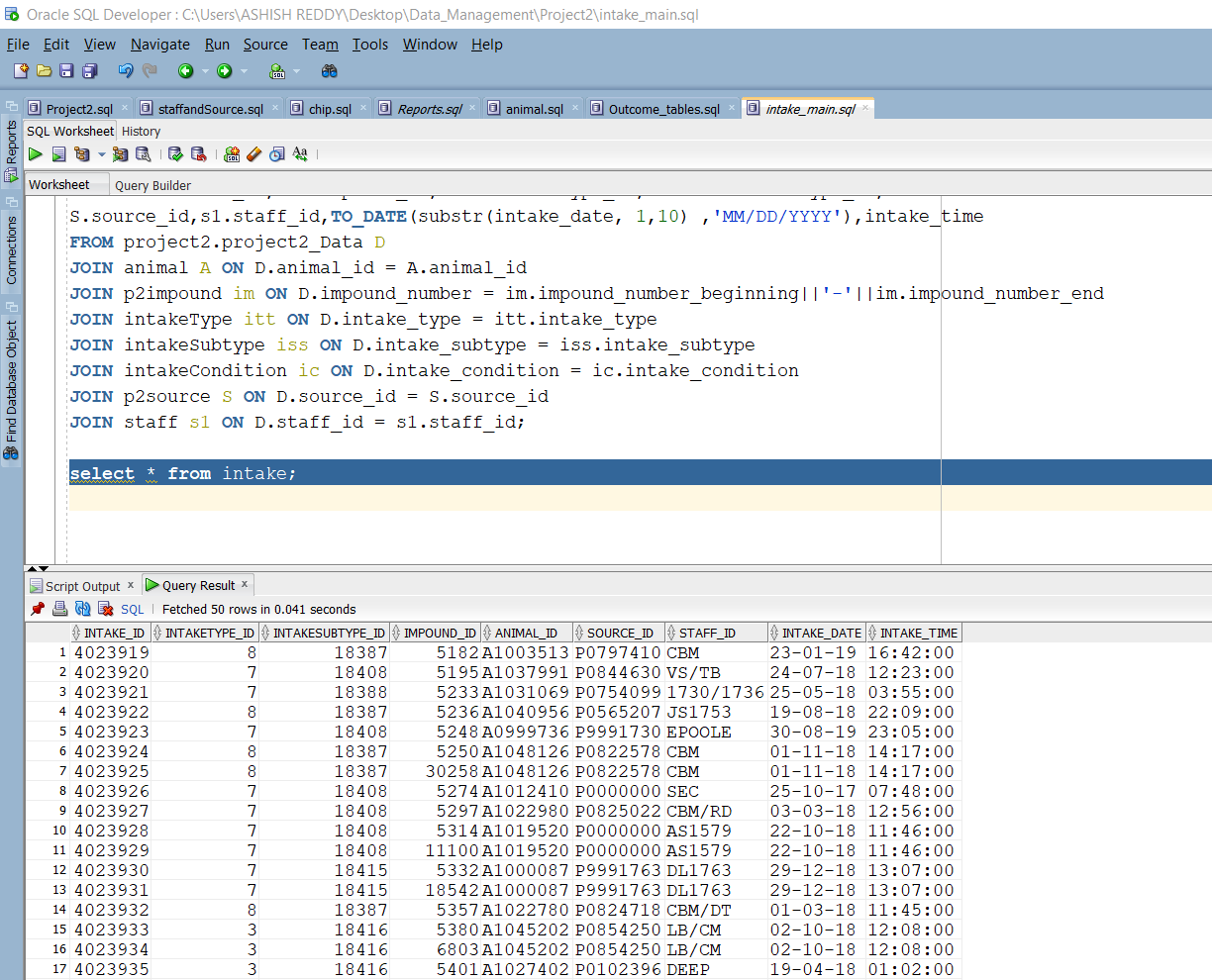
JOIN intakeSubtype iss ON D.intake\_subtype = iss.intake\_subtype

JOIN intakeCondition ic ON D.intake\_condition = ic.intake\_condition

JOIN p2source S ON D.source\_id = S.source\_id

JOIN staff s1 ON D.staff\_id = s1.staff\_id;

select \* from intake;



Outcome:

drop table outcome;

create table outcome(

outcome\_id number generated by default on null as identity,

outcometype\_id number,

outcomesubtype\_id number,

outcomecondition\_id number,

outcome\_date date,

outcome\_time varchar2(200),

intake\_id number,

staff\_id varchar2(200),

animal\_id VARCHAR2(200)

);

alter table outcome

add constraint outcome\_id\_pk primary key(outcome\_id);

alter table outcome

add constraint outcometype\_id\_fk foreign key(outcometype\_id) references outcomeType(outcometype\_id);

alter table outcome

add constraint outcomesubtype\_id\_fk foreign key(outcomesubtype\_id) references outcomeSubtype(outcomesubtype\_id);

alter table outcome

add constraint outcomecondition\_id\_fk foreign key(outcomecondition\_id) references outcomeCondition(outcomecondition\_id);

INSERT INTO outcome (INTAKE\_ID, outcometype\_id, outcomesubtype\_id, outcomecondition\_id, RECEIPT\_NUMBER, OUTCOME\_DATE, OUTCOME\_TIME)

SELECT A.INTAKE\_ID AS INTAKE\_ID, T.outcometype\_id AS TYPE\_ID, S.outcomesubtype\_id AS SUBTYPE\_ID,

C.outcomecondition\_id AS CONDITION\_ID, D.RECEIPT\_NUMBER,

CASE WHEN D.OUTCOME\_DATE IS NOT NULL THEN TO\_DATE(D.OUTCOME\_DATE, 'MM/DD/YYYY HH:MI:SS AM') ELSE NULL END AS OUTCOME\_DATE, D.OUTCOME\_TIME

FROM Project2.Project2\_data D,

outcomeType T,

outcomeSubtype S,

outcomeCondition C,

(SELECT I.intake\_id AS INTAKE\_ID, I.INTAKE\_DATE, B.impound\_number\_beginning||'-'||B.impound\_number\_end AS IMPOUND\_NUMBER

FROM intake I, p2impound B

WHERE B.impound\_id = I.impound\_id) A

WHERE T.OUTCOME\_TYPE = D.OUTCOME\_TYPE

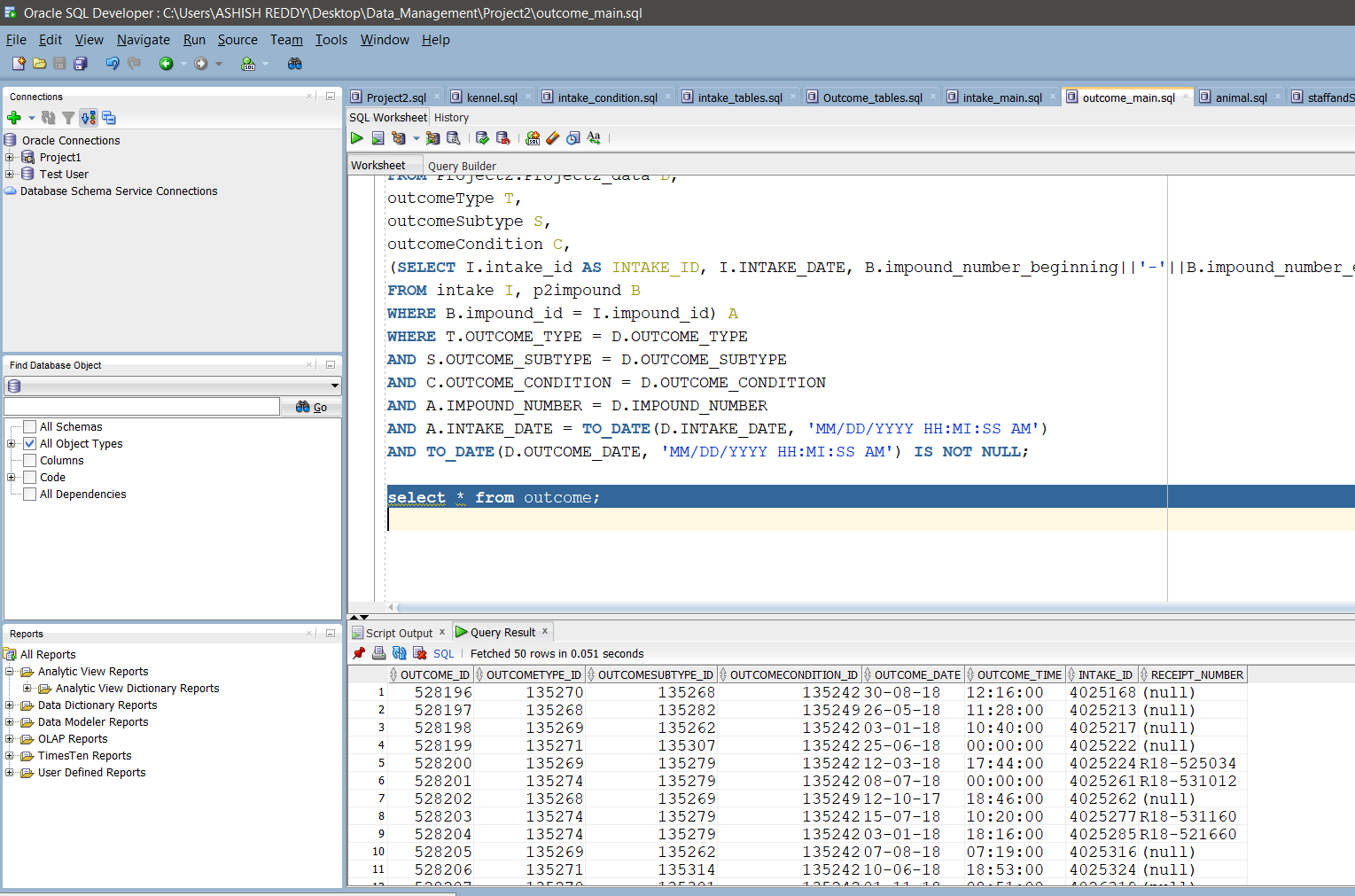
AND S.OUTCOME\_SUBTYPE = D.OUTCOME\_SUBTYPE

AND C.OUTCOME\_CONDITION = D.OUTCOME\_CONDITION

AND A.IMPOUND\_NUMBER = D.IMPOUND\_NUMBER

AND A.INTAKE\_DATE = TO\_DATE(D.INTAKE\_DATE, 'MM/DD/YYYY HH:MI:SS AM')

AND TO\_DATE(D.OUTCOME\_DATE, 'MM/DD/YYYY HH:MI:SS AM') IS NOT NULL;



REPORTS:

1.)

What breed has best chance of survival for the years 2017, 2018,2019 and 2020 ?

SIBERIAN HUSKY

select \* from(

select animaltype, animalbreed, max(total\_count) as Best\_breed from(

select a.animal\_id as animalid,at.animal\_type as animaltype, ab.animal\_breed as animalbreed,count(a.animal\_id) as total\_count

from

outcome o, intake i, animal a, outcomeType ot, animalCensus ac, animalType at, animalBreed ab

where o.intake\_id = i.intake\_id and i.animal\_id = a.animal\_id

and o.outcometype\_id = ot.outcometype\_id

and ac.animal\_id = a.animal\_id

and a.type\_id = at.animaltype\_id

and ab.breed\_id = a.breed\_id

and ot.outcome\_type not in ('DIED','EUTHANIZED')

and ac.year in('FY2017','FY2018','FY2019','FY2020')

and o.outcome\_date > i.intake\_date

group by at.animal\_type, ab.animal\_breed, a.animal\_id

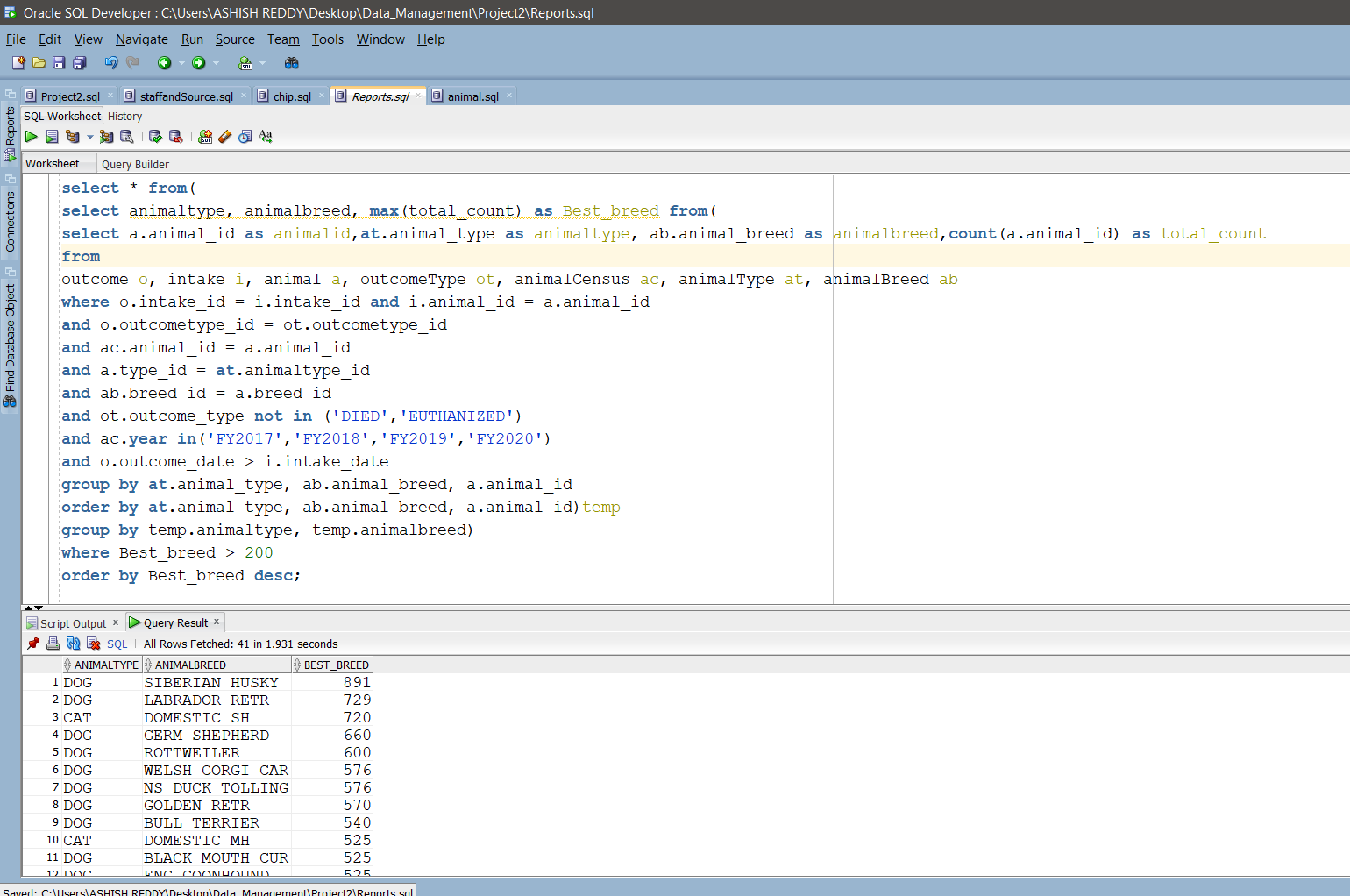
order by at.animal\_type, ab.animal\_breed, a.animal\_id)temp

group by temp.animaltype, temp.animalbreed)

where Best\_breed > 200

order by Best\_breed desc;

--DIED and EUTHANIZED not included according to pdf



2.)

SELECT animal\_type, Intake\_Type, outcome\_type, Animal\_Count,

round(Animal\_Count/(sum(Animal\_Count) OVER (partition by

animal\_type))\*100,2)||''||'%' as Outcome\_Total,

round(Animal\_Count/(sum(Animal\_Count)

OVER (partition by animal\_type,intake\_type ORDER by intake\_type DESC))\*100,2)||''||'%' as Intake\_Percent,

round(Animal\_Count/(sum(Animal\_Count)

OVER (partition by animal\_type,outcome\_type ORDER by outcome\_type DESC))\*100,2)||''||'%' as Outcome\_Percent

FROM

(SELECT at.animal\_type, AIn.intake\_type, AOut.outcome\_type,count(a.animal\_id) as Animal\_Count

FROM

animal a, animalBreed B, animalType at,

intakeType AIn, intake i,

outcomeType AOut, outcome O

WHERE a.animal\_id = i.animal\_id

AND a.breed\_id = B.breed\_id

AND at.animaltype\_id=a.Type\_ID

AND at.animal\_type IN ('WILDLIFE', 'BIRD')

AND O.intake\_id = i.intake\_id

AND AOut.outcometype\_id = O.outcometype\_id

AND AIn.intaketype\_id = i.intaketype\_id

GROUP BY at.animal\_type, AOut.outcome\_type, AIn.intake\_type

ORDER BY at.animal\_type, AOut.outcome\_type, AIn.intake\_type);

