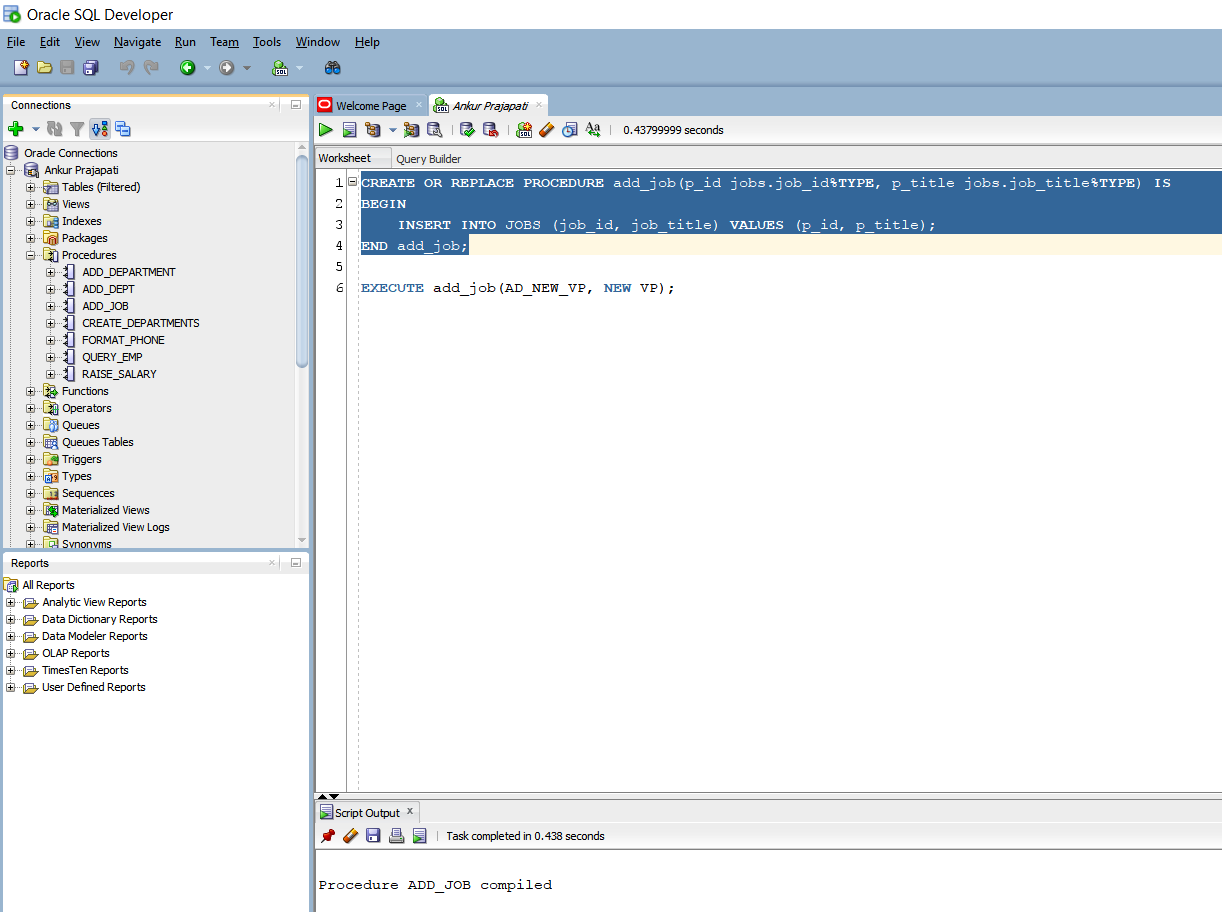
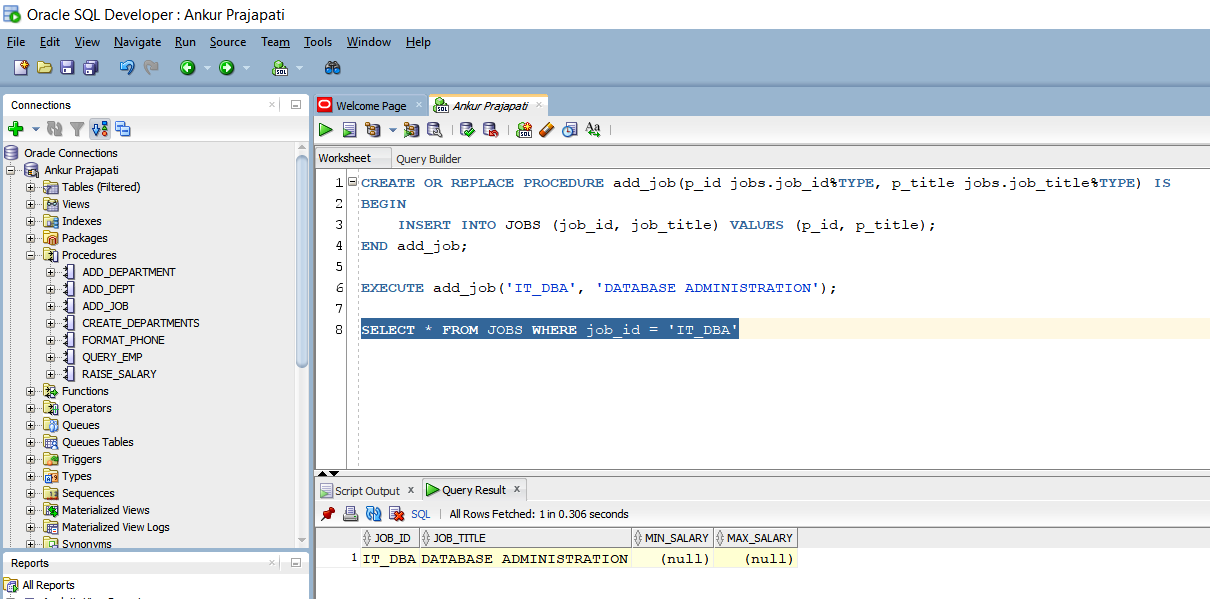
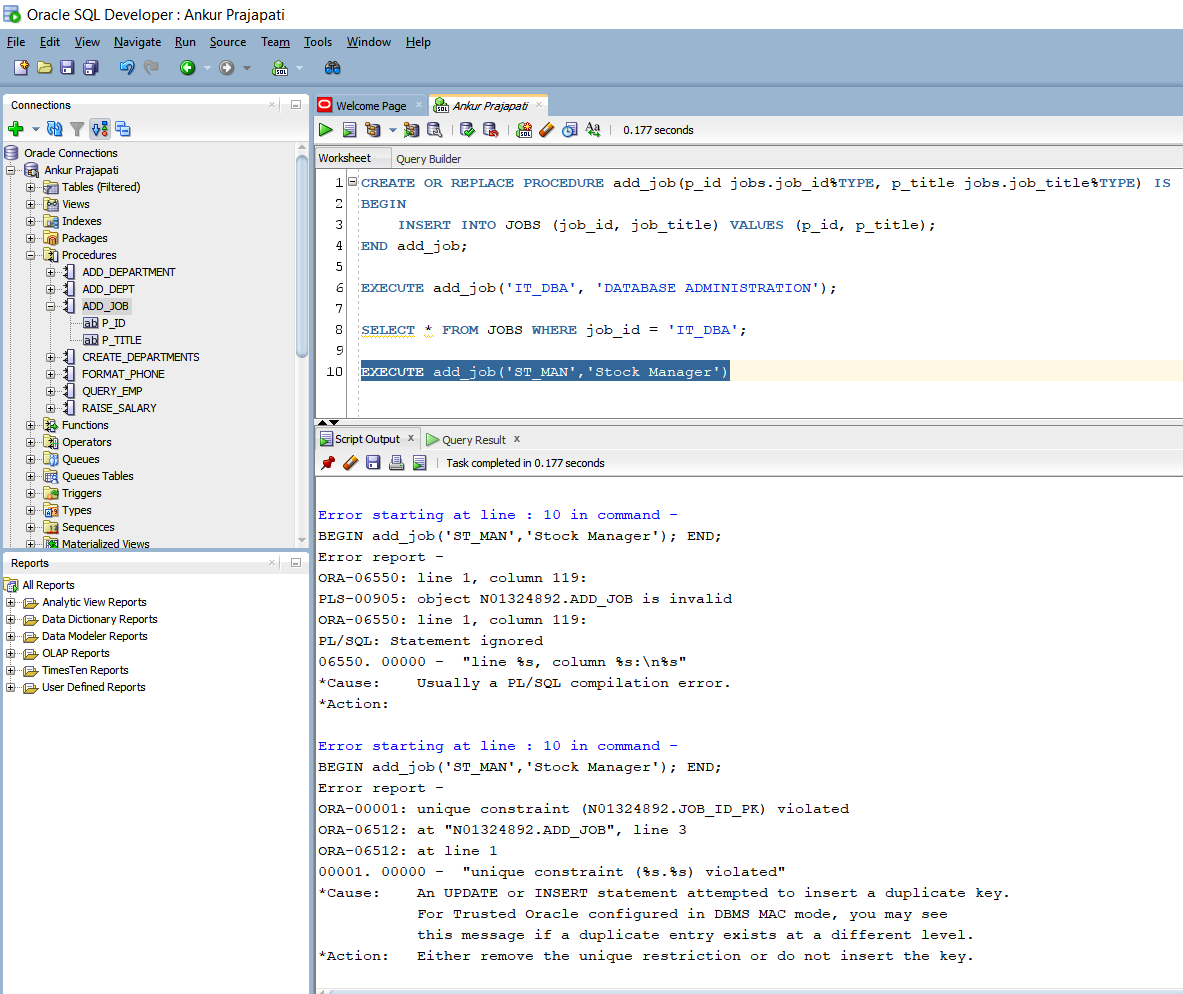
1. ADD\_JOB Procedure:



Here we are creating add\_job procedure. As per the statement it will create new add\_job procedure if it doesn’t exist otherwise it will drop it and again it will create. It will add job\_id and job\_title with using formal parameters p\_id and p\_title.

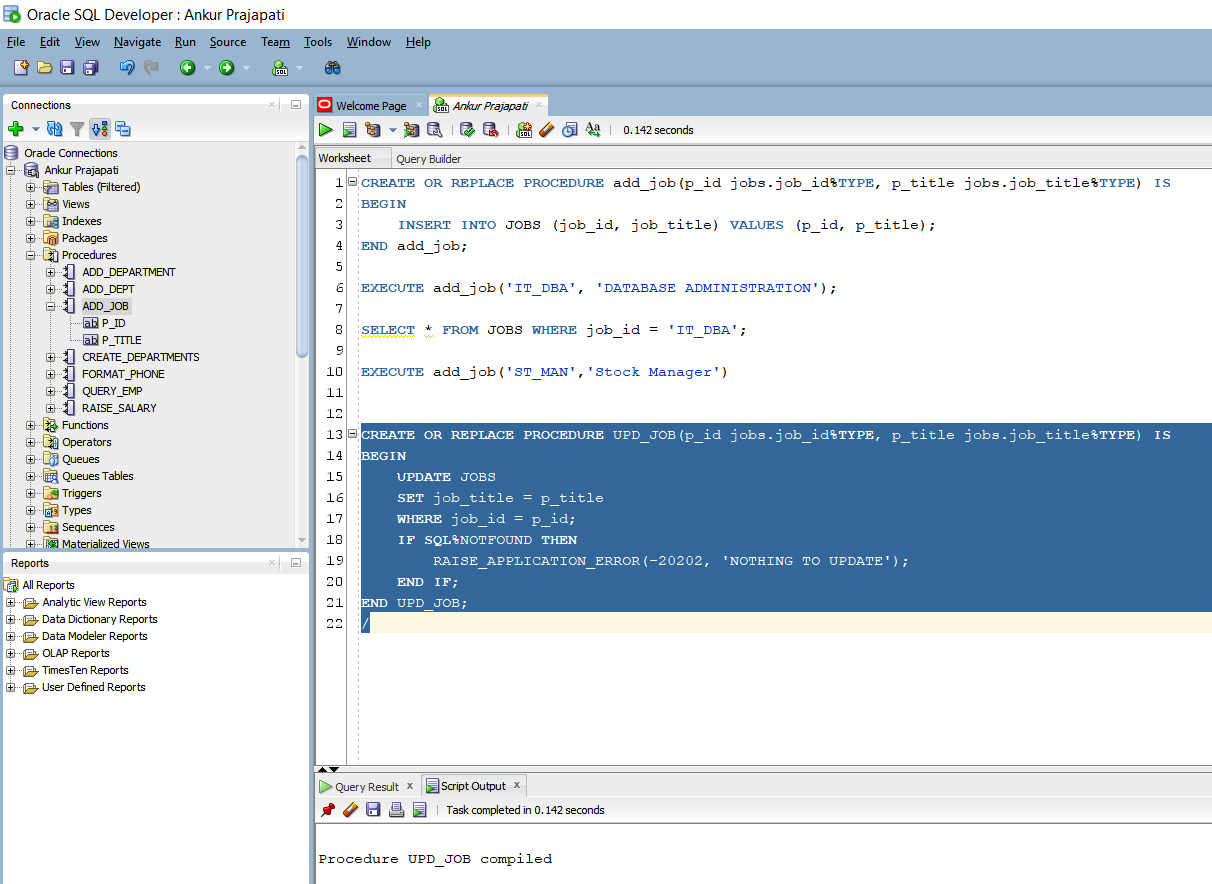


Here it will add new job with job\_id having value of ‘IT\_DBA’.



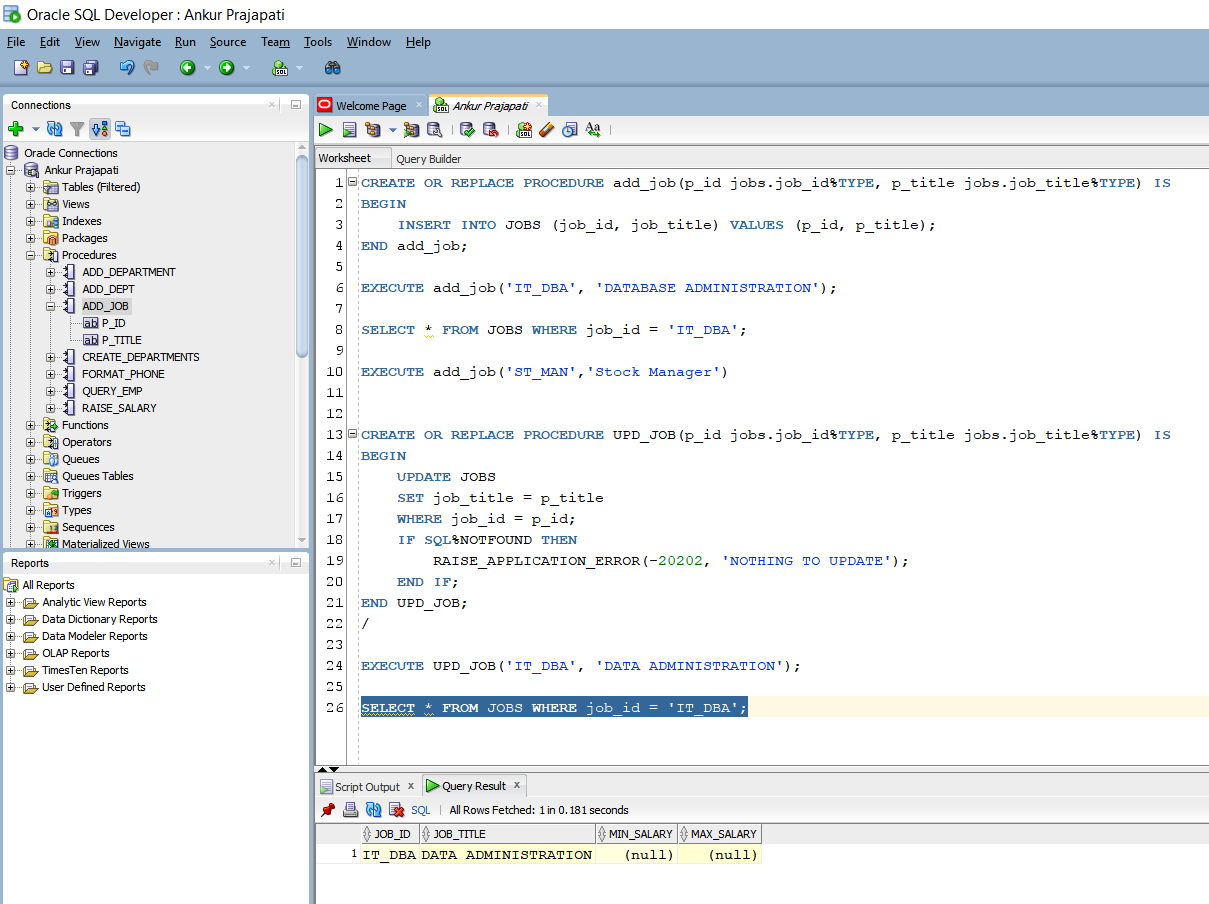
Here I am trying to add new job with job\_id = ‘ST\_MAN’ and job\_title = ‘Stock Manager’ but it gives error of unique key constraint violation. It means there is same data with that job\_id is available. It gives solution that either remove the unique restriction or do not insert the key.

1. UPD\_JOB Procedure:

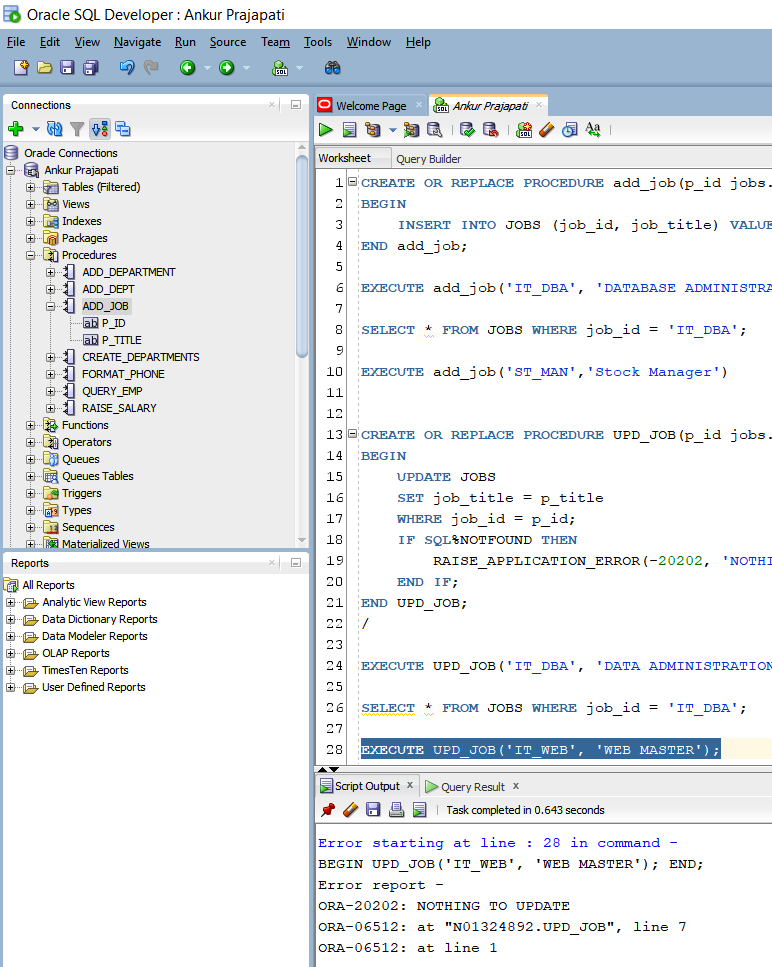


Here I am creating a procedure named UPD\_JOB with formal parameters p\_id with type of job\_id, p\_title with type of job\_title. In this it sets job\_title with p\_title. If SQL%NOTFOUND then it will return message showing ‘Nothing To UPDATE’.

Basically, it job\_id is not there then it won’t update and will return error.

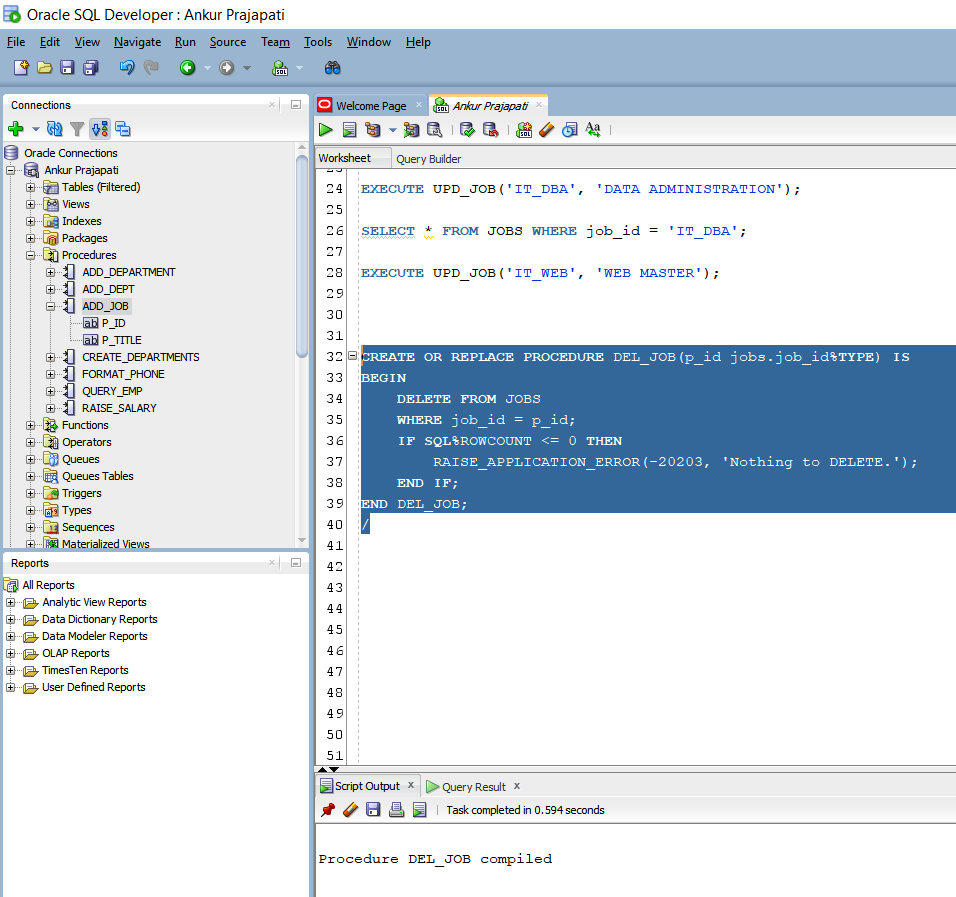


Here I am trying to update job with job\_id = ‘IT\_DBA’. First it was named as ‘DATABASE ADMINISTRATION’ to ‘DATA ADMINISTRATION’.



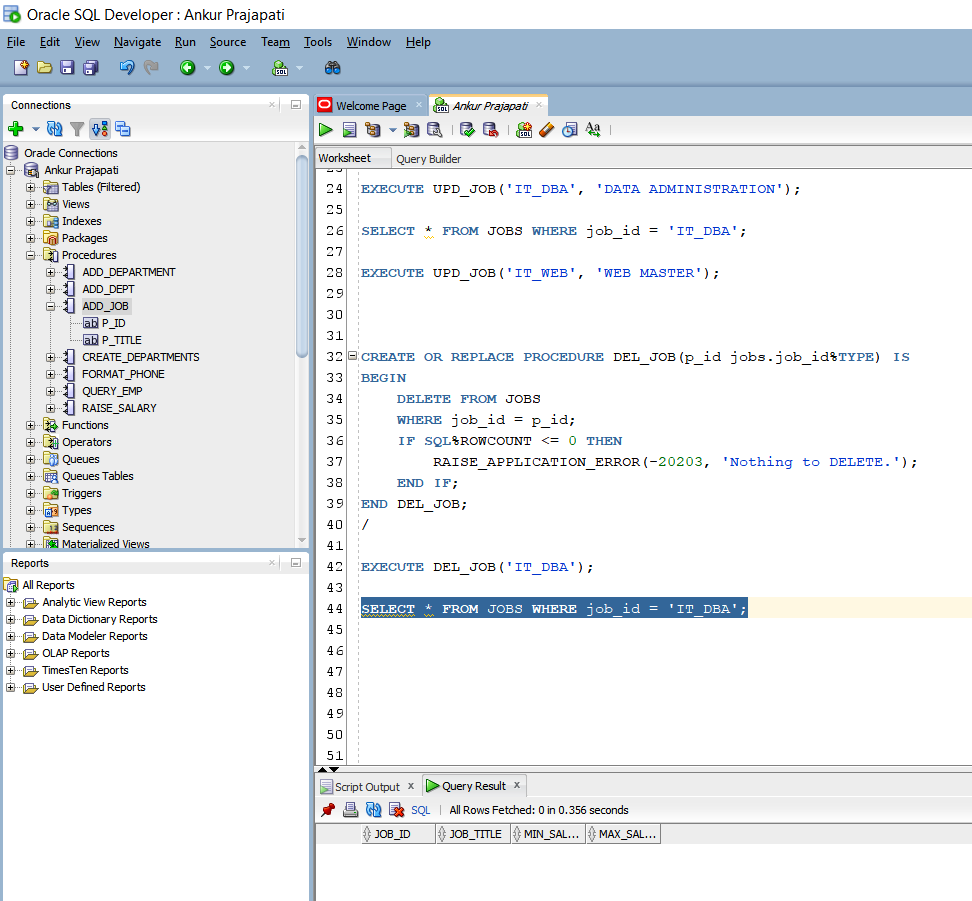
Here I am trying to update job having job\_id = ‘IT\_WEB’ but it’s not stored in database so it gives an error message notifying that ‘Nothing to Update’ associated to SQLERRORCode.

1. DEL\_JOB Procedure:



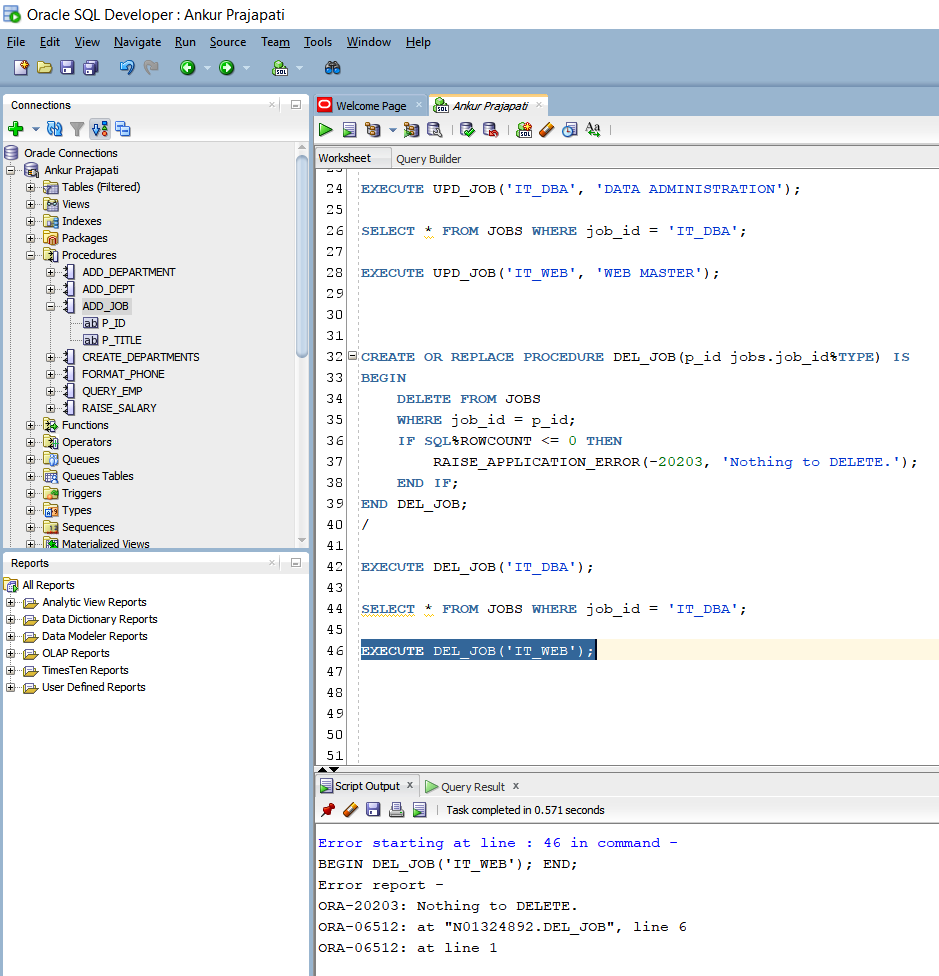
Here I am creating procedure named DEL\_JOB with formal parameter p\_id having type of job\_id. It deletes job having same id in database.

If there is no row available to delete (SQL%ROWCOUNT is less than 0) then it will give error message that ‘Nothing To DELETE’ associated with SQLERRORCODE -20203.



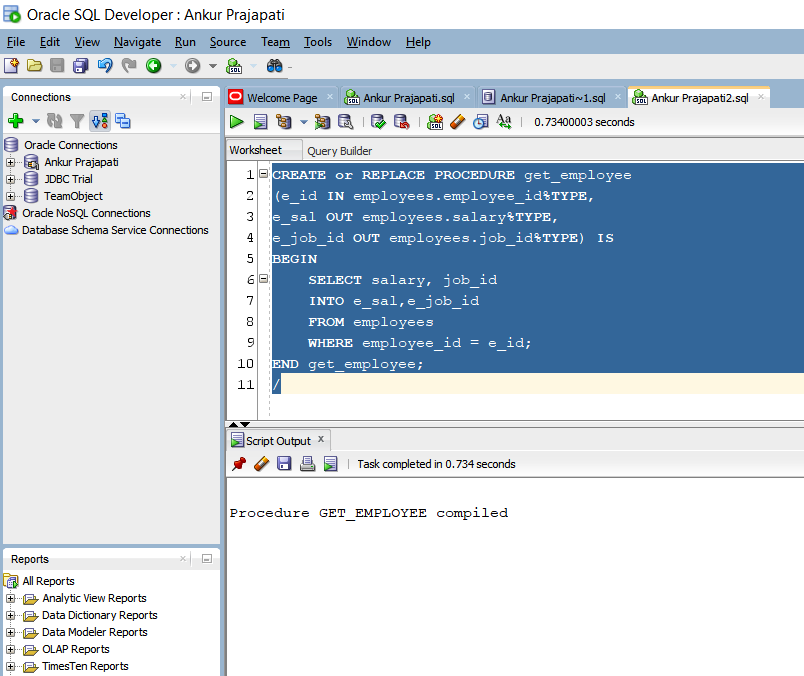
There is data stored in database with job\_id = ‘IT\_DBA’ and I have deleted it from here.

That’s why it is showing us the blank record.

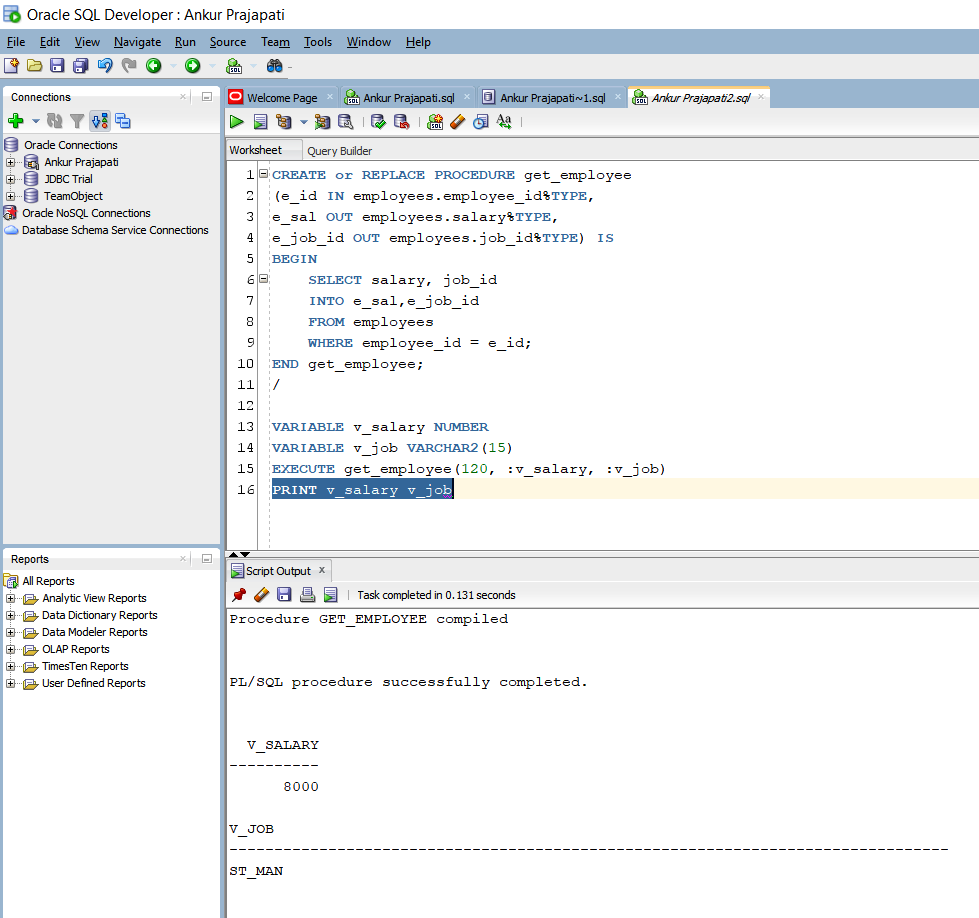


Here it will give error that there is nothing to delete because there is not record of job\_id = ‘IT\_WEB’.

1. GET\_EMPLOYEE Procedure:

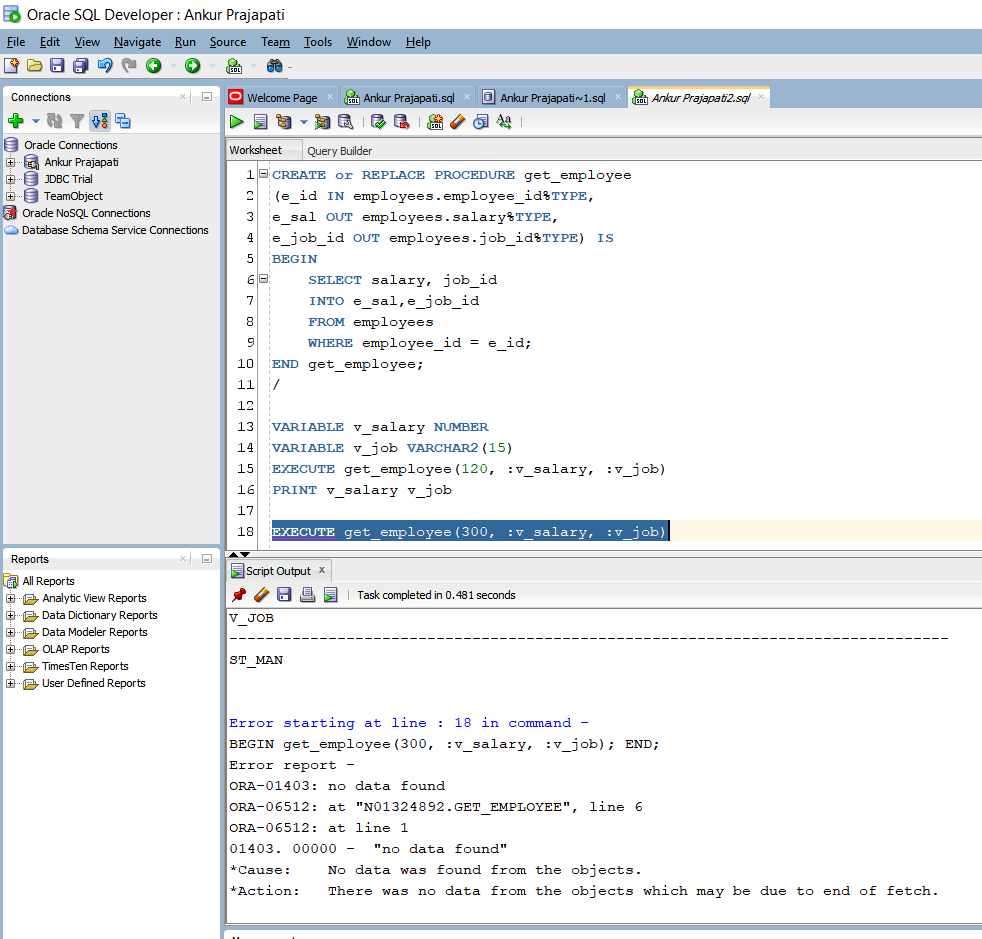


Here I am creating get\_employee procedure with formal parameters e\_Id with type of employees.employee\_id, e\_sal with type of employees.salary and e\_job\_id with type of employees.job\_id where employee\_id(actual parameter) is same as e\_id(formal parameters).



Here v\_salary of NUMBER type and v\_job of VARCHAR2 type is declared.

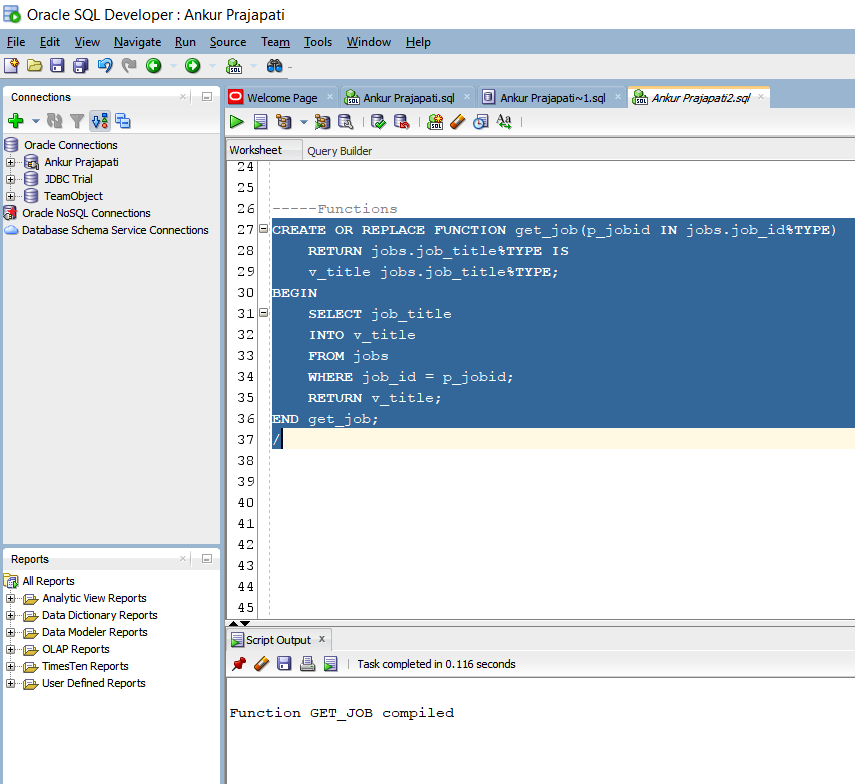
Here employee\_id is 120 and based on that salary and job\_id associated with it will be printed using bind variable. Note that here e\_id is of TYPE IN which means we have to give it, where v\_salary and v\_job is of TYPE OUT that means it will give data to us.



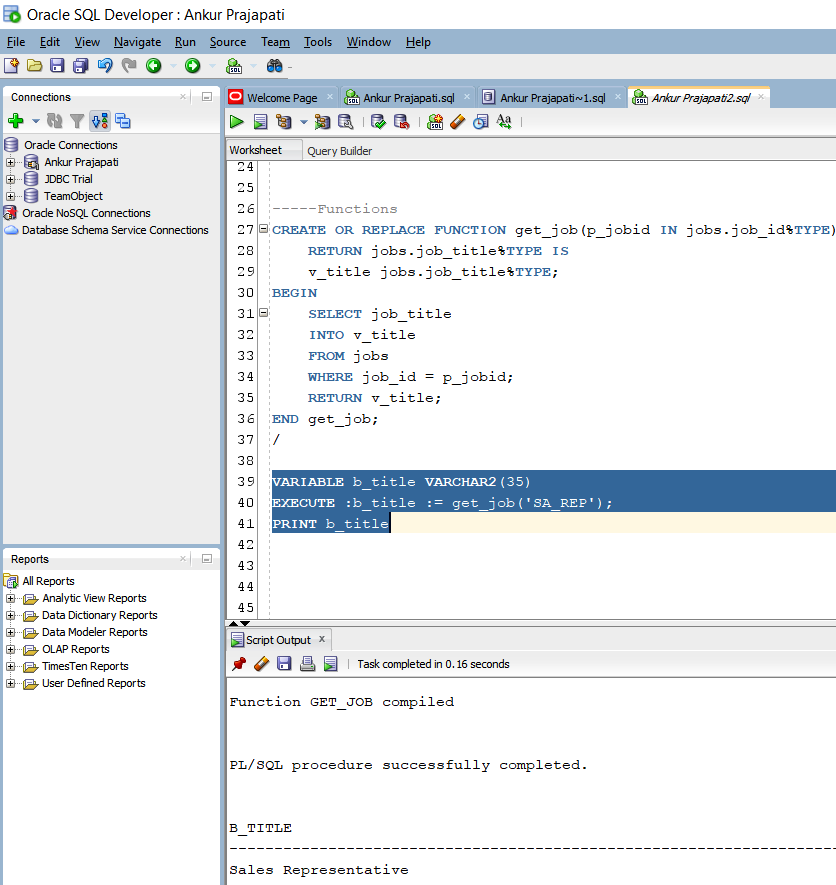
Here we tried to fetch data from employees table having employee id 300. But as you can see, we have no data for this. So that it gives an error no data found.

Practice 3: Creating Functions:

1. GET\_JOB Function:



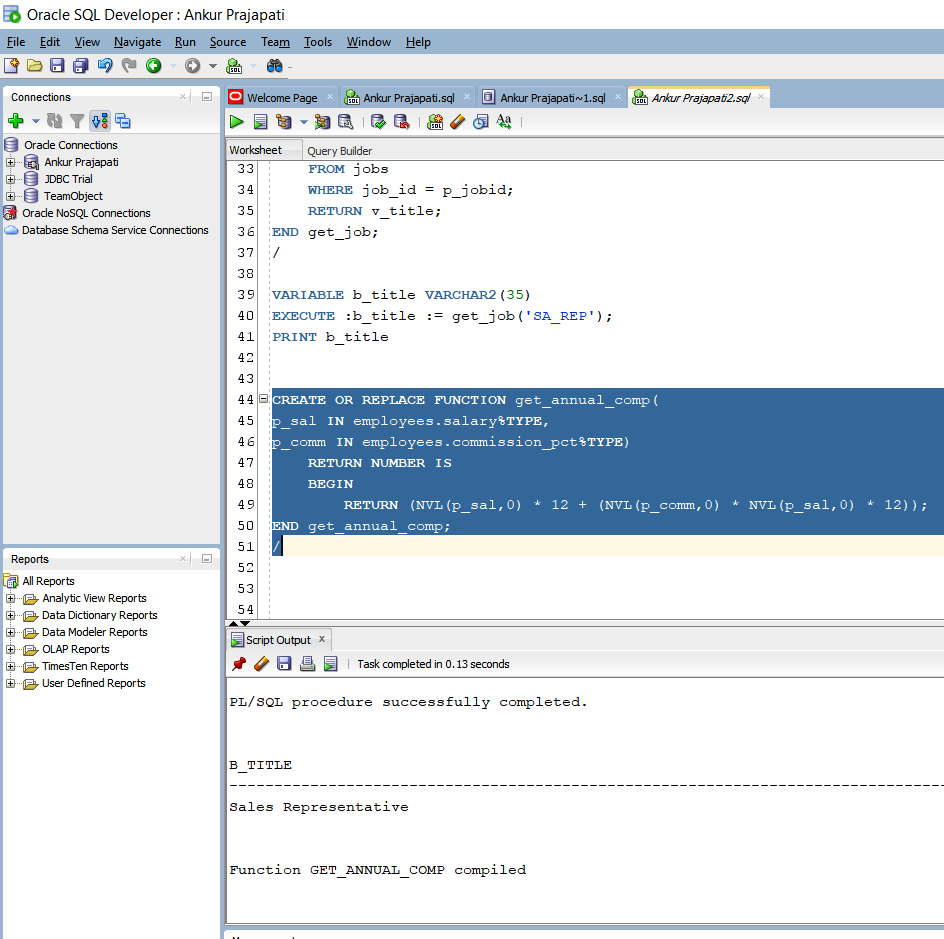
GET\_JOB is compiled



Here it gives job title from given job\_id.

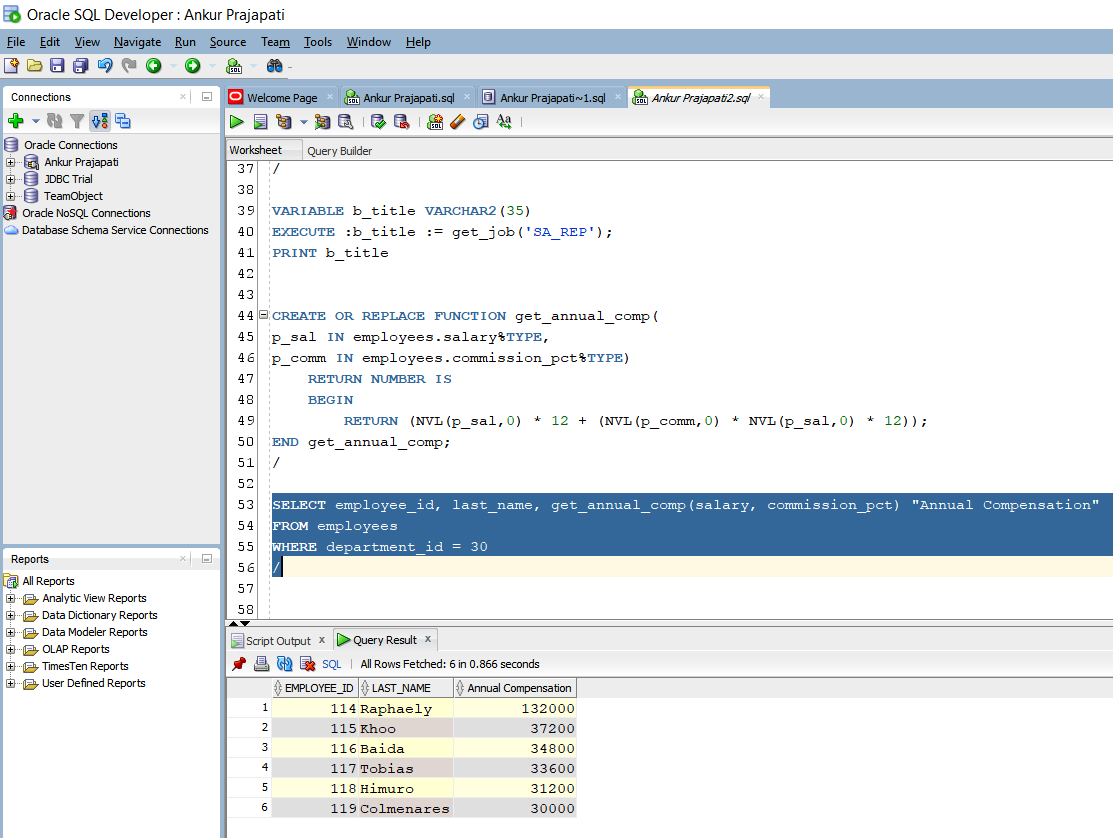
For example, SA\_REP to SALES REPRESENTATIVE.

1. GET\_ANNUAL\_COMP Function:



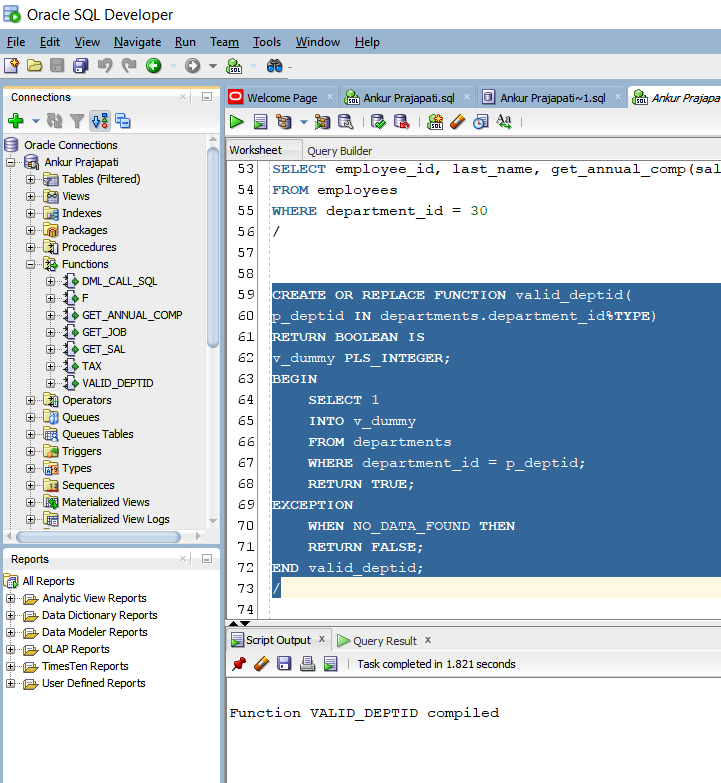
Get\_annual\_comp is compiled. And it returns annual compound salary.

Note that here NVL will ignore null values and it converts it to 0.



Fetching data of employees with id, last name and annual compensation where department id is 30.

1. ADD\_EMPLOYEE:



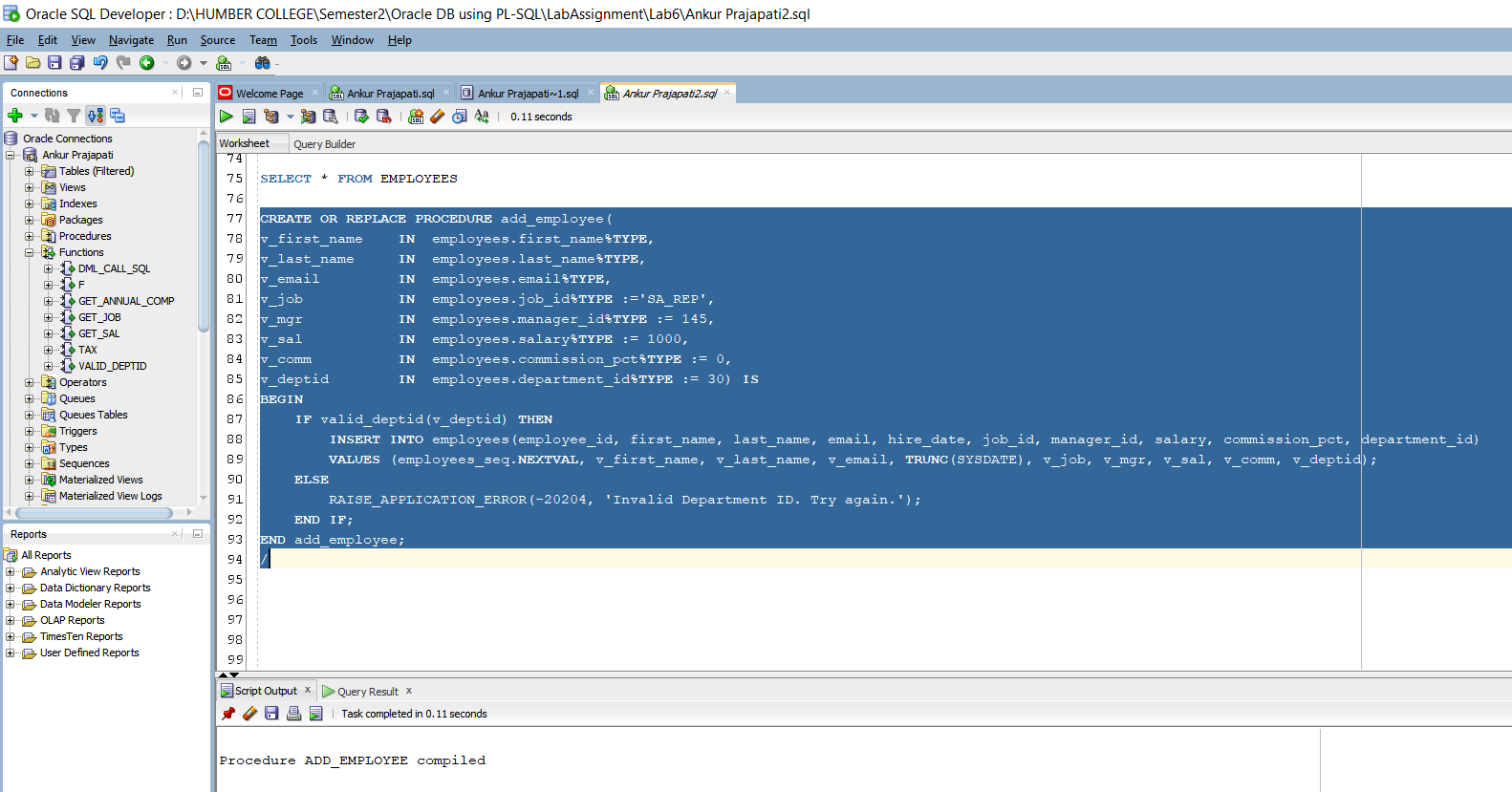
Creation of valid\_deptid function.

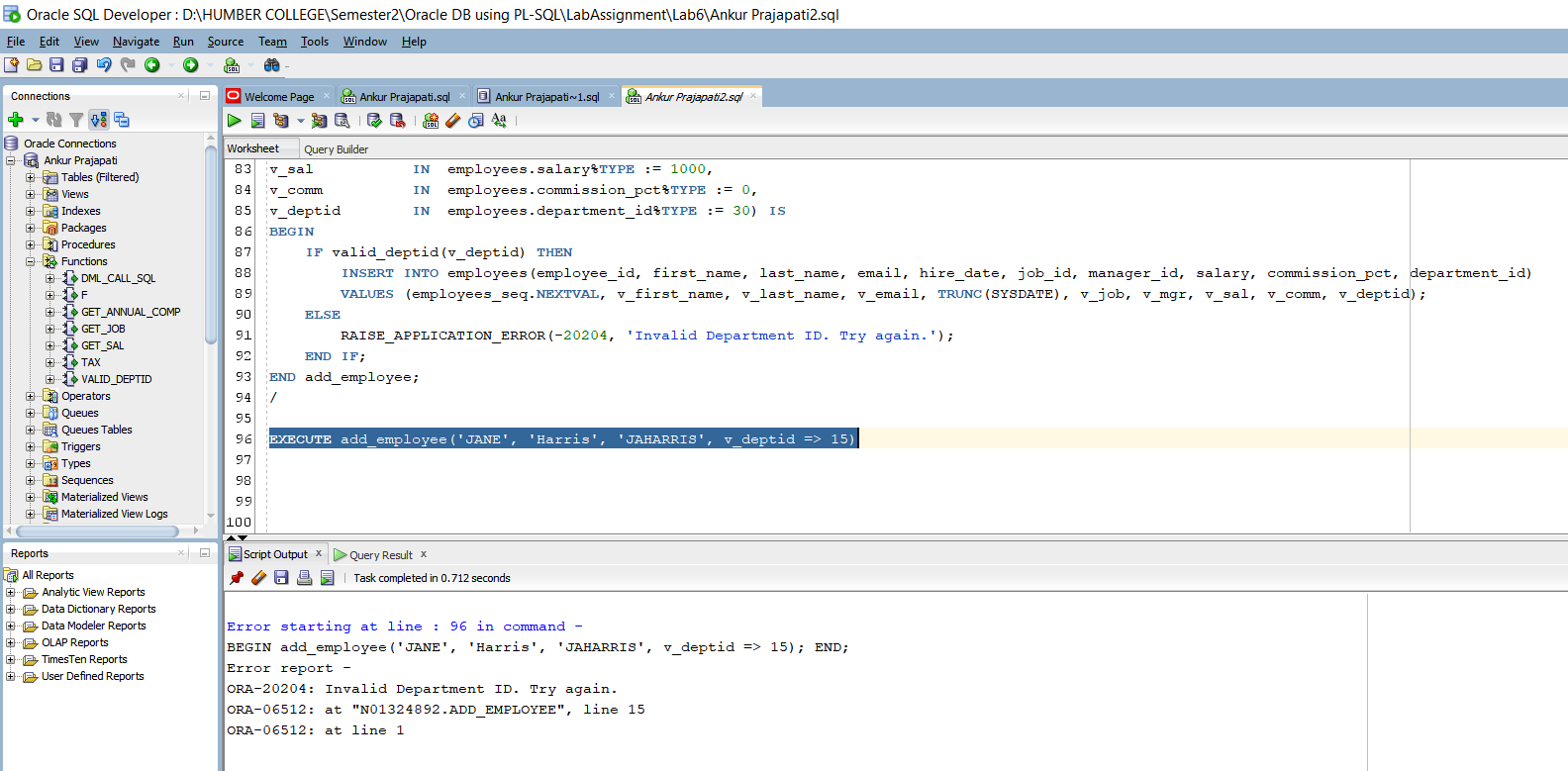
We are selecting 1 into v-dummy which is PLS\_INTEGER from departments table if the department id is there with given department id(p\_deptid).

There is an Exception block is also included if we don’t have data then it will return false.

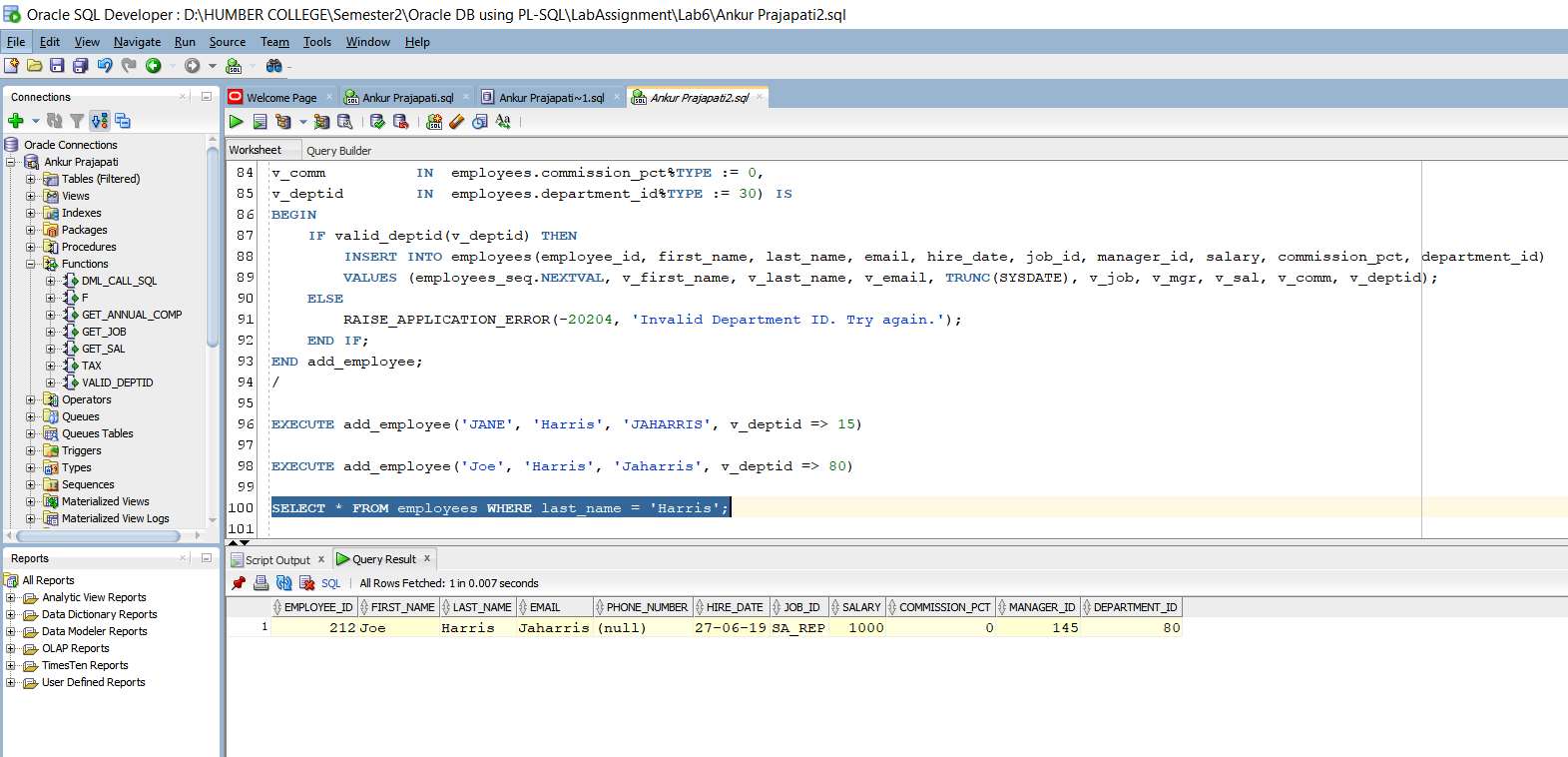
Creation of add\_employee procedure. First, we declared all the formal parameters using data type from employees table.

In executable section, there is one IF condition which checks if the valid\_deptid(v\_deptid) is true or not. If it is true it will insert values into employees table. If it is not true then it will raise an application error notifying Invalid Department ID. Try again.





Here add\_employee is executed and due to department id miss matching it gives invalid department id.



Adding new record here in table.

It prints the inserted record here.