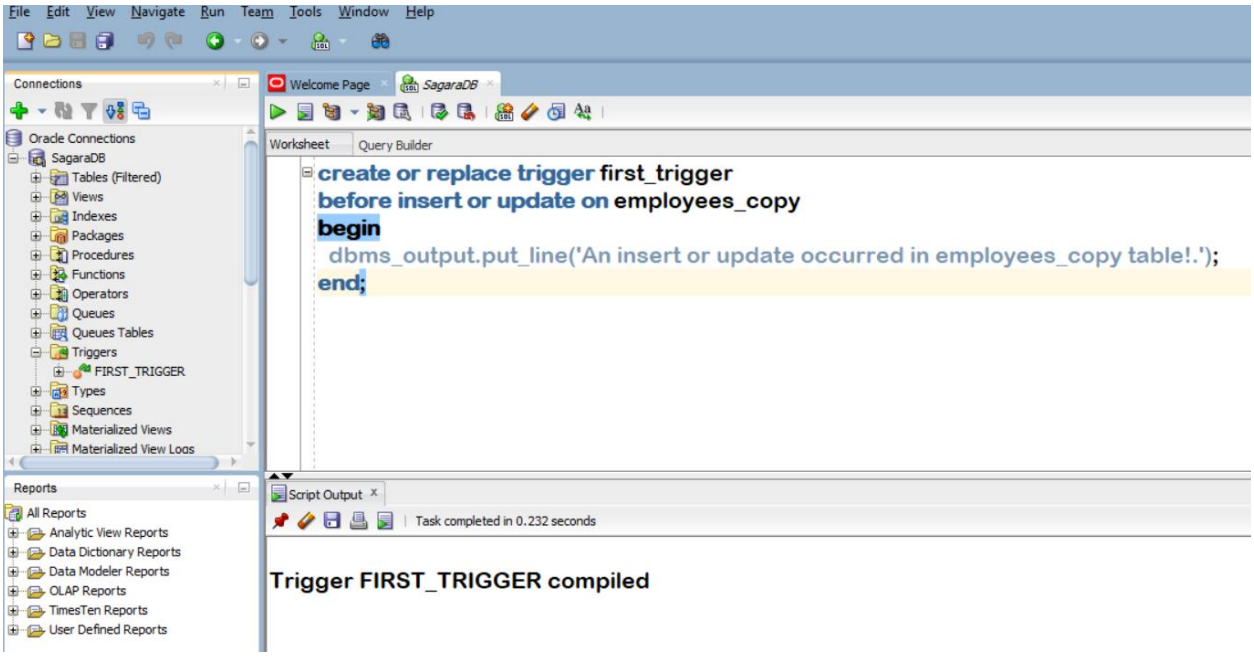
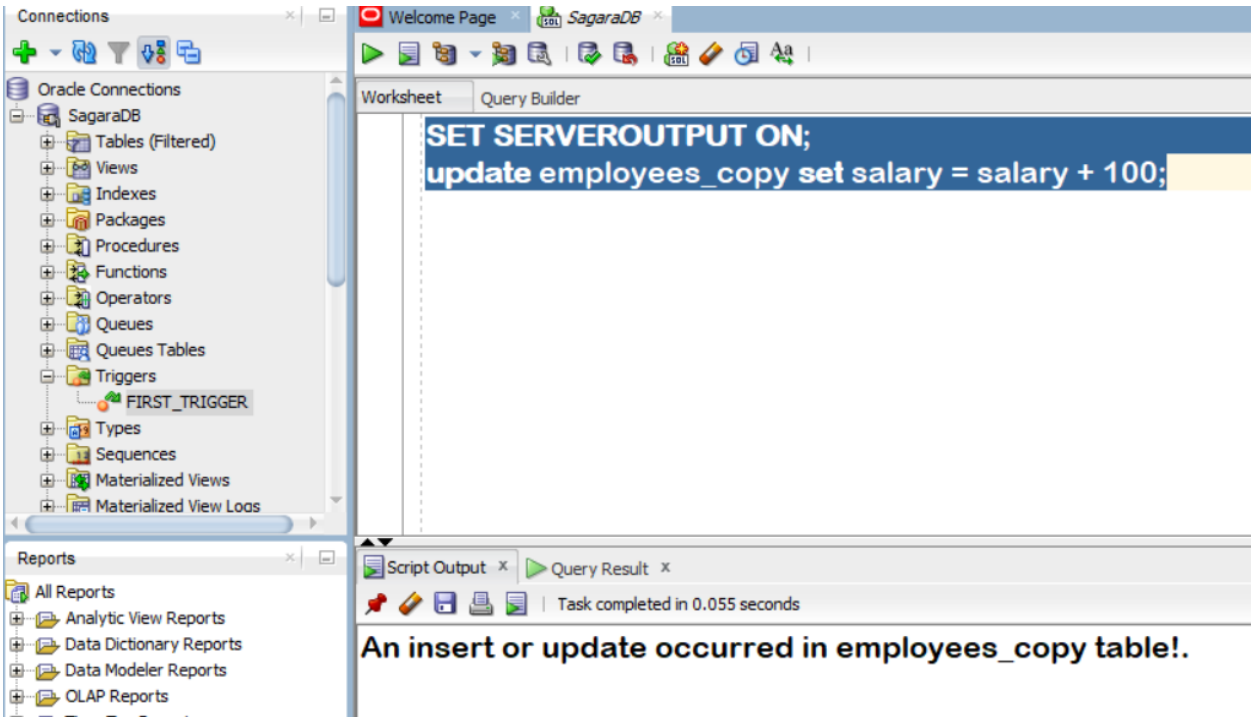
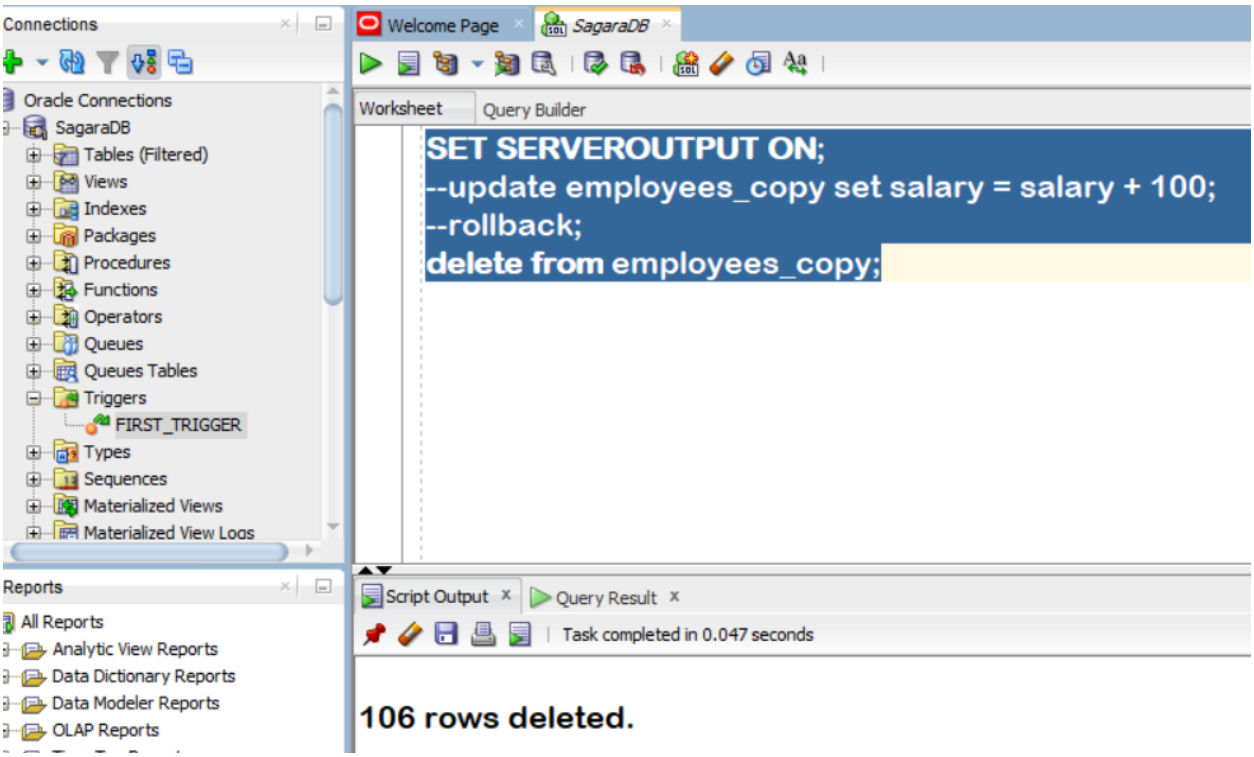
Week 10 – Trigger Lab :



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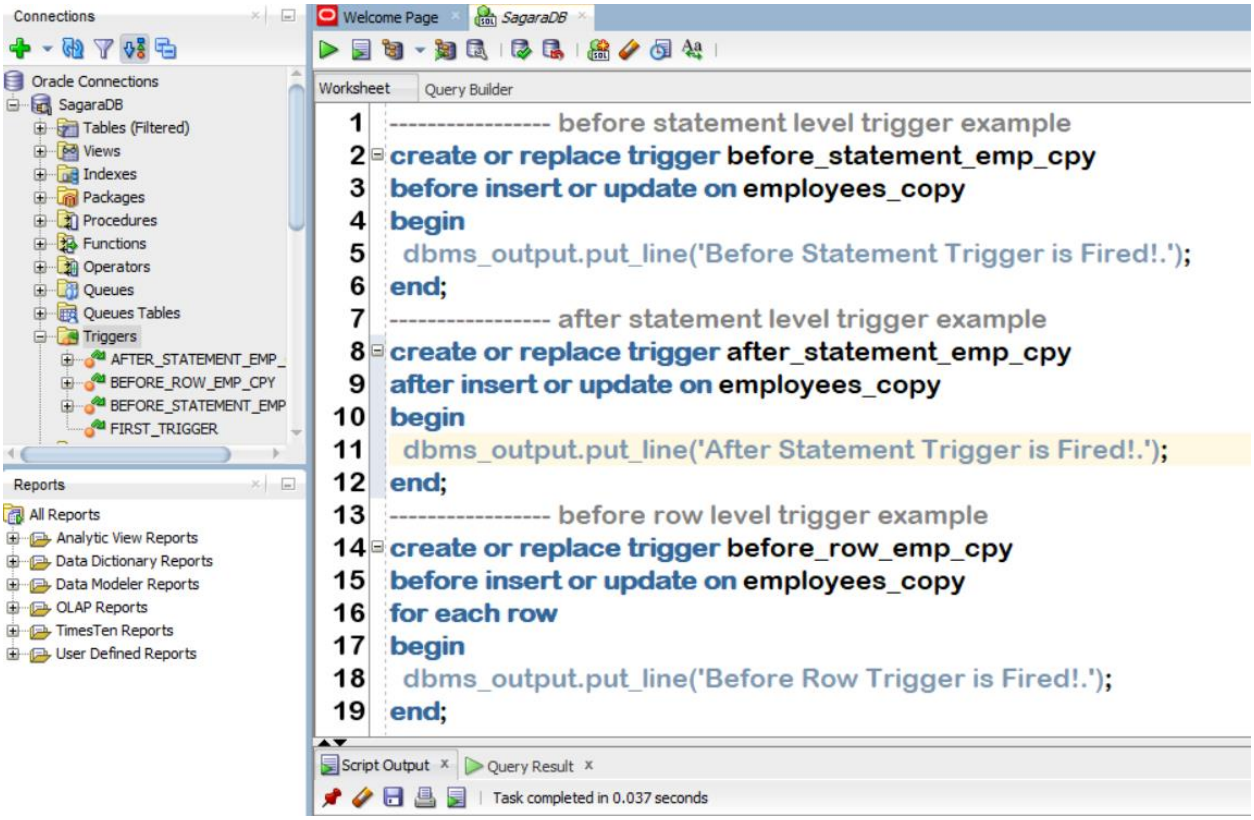
Query Builder
SET SERVEROUTPUT ON;
--update employees_copy set salary = salary + 100;
--rollback;
delete from employees_copy;
Script Output
Query Result
Task completed in 0.047 seconds
106 rows deleted.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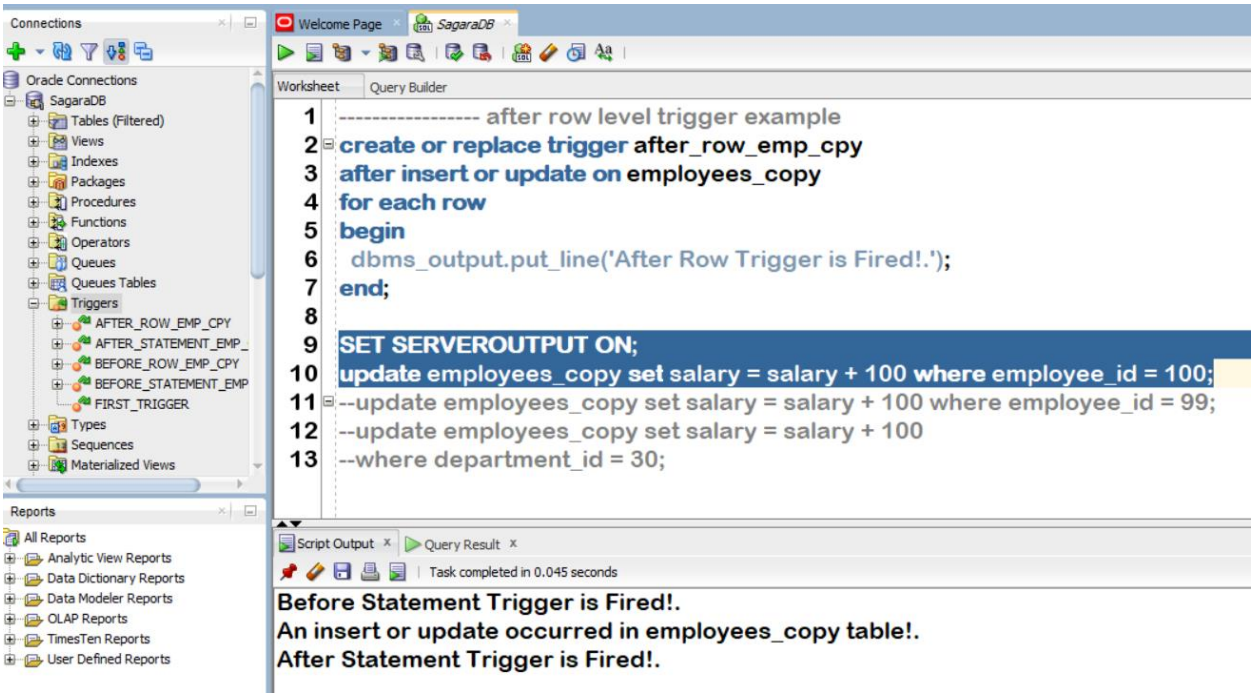
Query Builder
1 ---------- before statement level trigger example
2 create or replace trigger before_statement_emp_cpy
3 before insert or update on employees_copy
4 begin
5 dbms_output.put_line('Before Statement Trigger is Fired!.');
6 end;
7 ---------- after statement level trigger example
8 create or replace trigger after_statement_emp_cpy
9 after insert or update on employees_copy
10 begin
11 dbms_output.put_line('After Statement Trigger is Fired!.');
12 end;
13 ---------- before row level trigger example
14 create or replace trigger before_row_emp_cpy
15 before insert or update on employees_copy
16 for each row
17 begin
18 dbms_output.put_line('Before Row Trigger is Fired!.');
19 end;
Script Output
Query Result
Task completed in 0.037 seconds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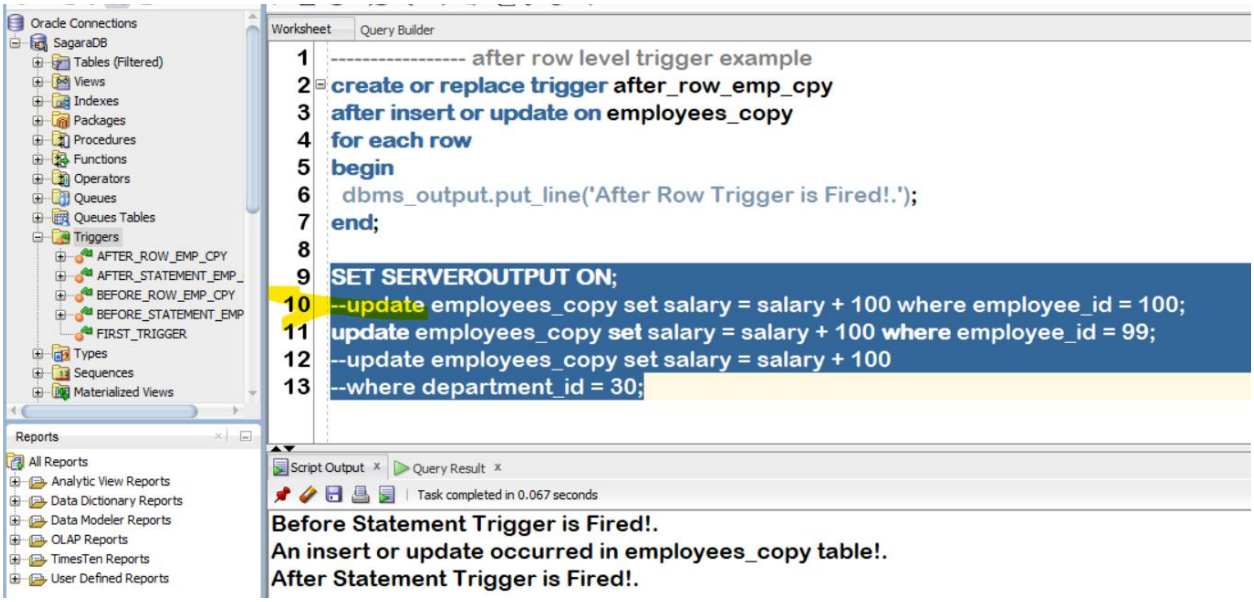
1 ---------- after row level trigger example
2 create or replace trigger after_row_emp_cpy
3 after insert or update on employees_copy
4 for each row
5 begin
6 dbms_output.put_line('After Row Trigger is Fired!.');
7 end;
8
9 SET SERVEROUTPUT ON;
10 update employees_copy set salary = salary + 100 where employee_id = 100;
11 --update employees_copy set salary = salary + 100 where employee_id = 99;
12 --update employees_copy set salary = salary + 100
13 --where department_id = 30;
Script Output
Query Result
Task completed in 0.045 seconds
Before Statement Trigger is Fired!.
An insert or update occurred in employees_copy table!.
After Statement Trigger is Fired!.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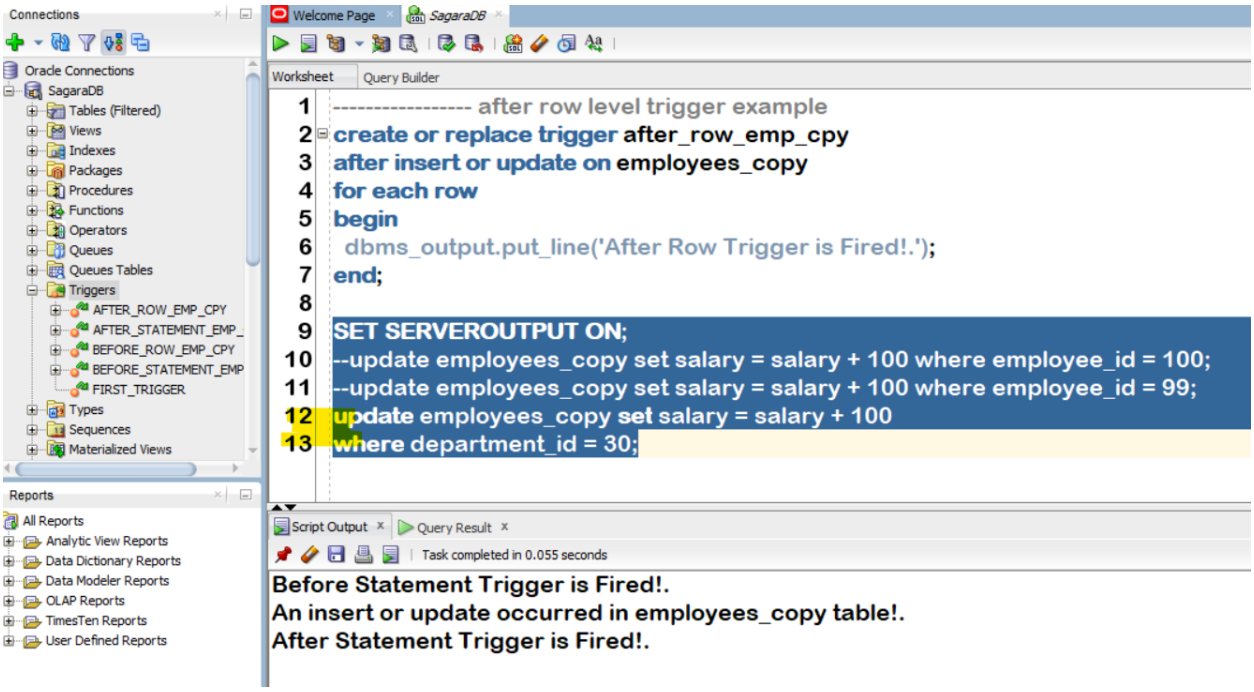
2 create or replace trigger after_row_emp_cpy
3 after insert or update on employees_copy
4 for each row
5 begin
6 dbms_output.put_line('After Row Trigger is Fired!.');
7 end;
8
9 SET SERVEROUTPUT ON;
10 --update employees_copy set salary = salary + 100 where employee_id = 100;
11 update employees_copy set salary = salary + 100 where employee_id = 99;
12 --update employees_copy set salary = salary + 100
13 --where department_id = 30;
Script Output
Query Result
Task completed in 0.067 seconds
Before Statement Trigger is Fired!.
An insert or update occurred in employees_copy table!.
After Statement Trigger is Fired!.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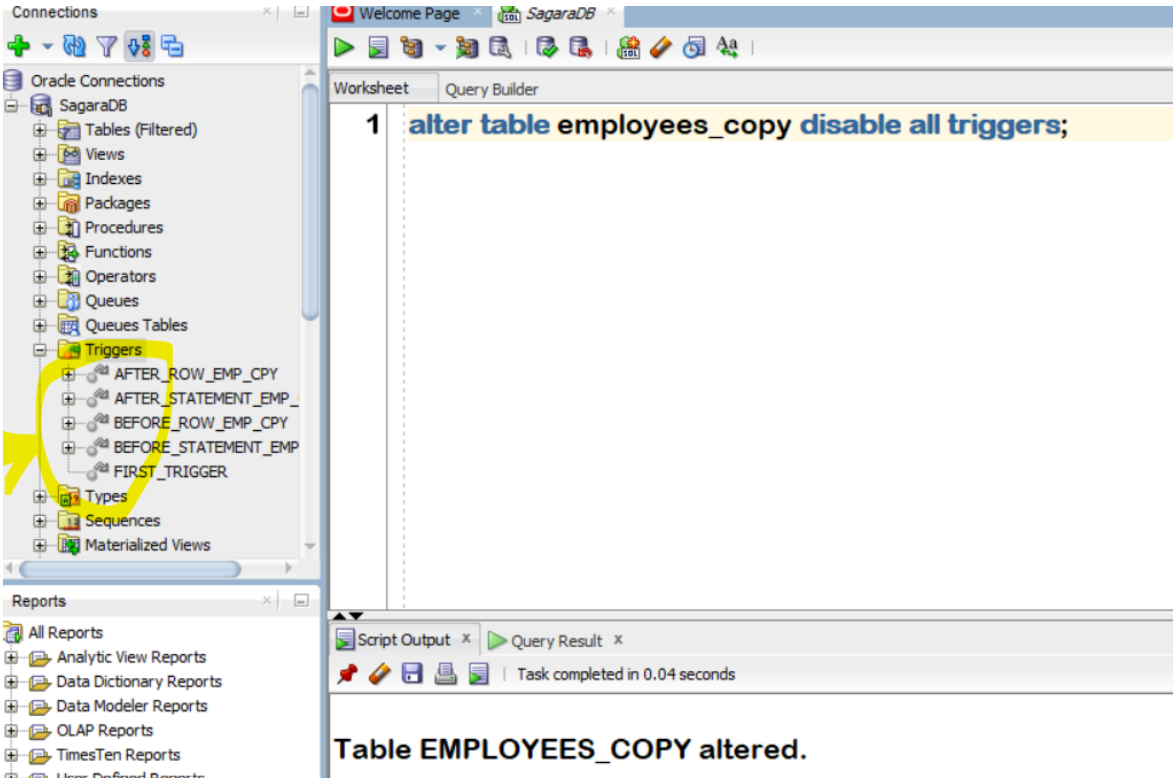
1 ---------- after row level trigger example
2 create or replace trigger after_row_emp_cpy
3 after insert or update on employees_copy
4 for each row
5 begin
6 dbms_output.put_line('After Row Trigger is Fired!.');
7 end;
8
9 SET SERVEROUTPUT ON;
10 --update employees_copy set salary = salary + 100 where employee_id = 100;
11 --update employees_copy set salary = salary + 100 where employee_id = 99;
12 update employees_copy set salary = salary + 100
13 where department_id = 30;
Script Output
Query Result
Task completed in 0.055 seconds
Before Statement Trigger is Fired!.
An insert or update occurred in employees_copy table!.
After Statement Trigger is Fired!.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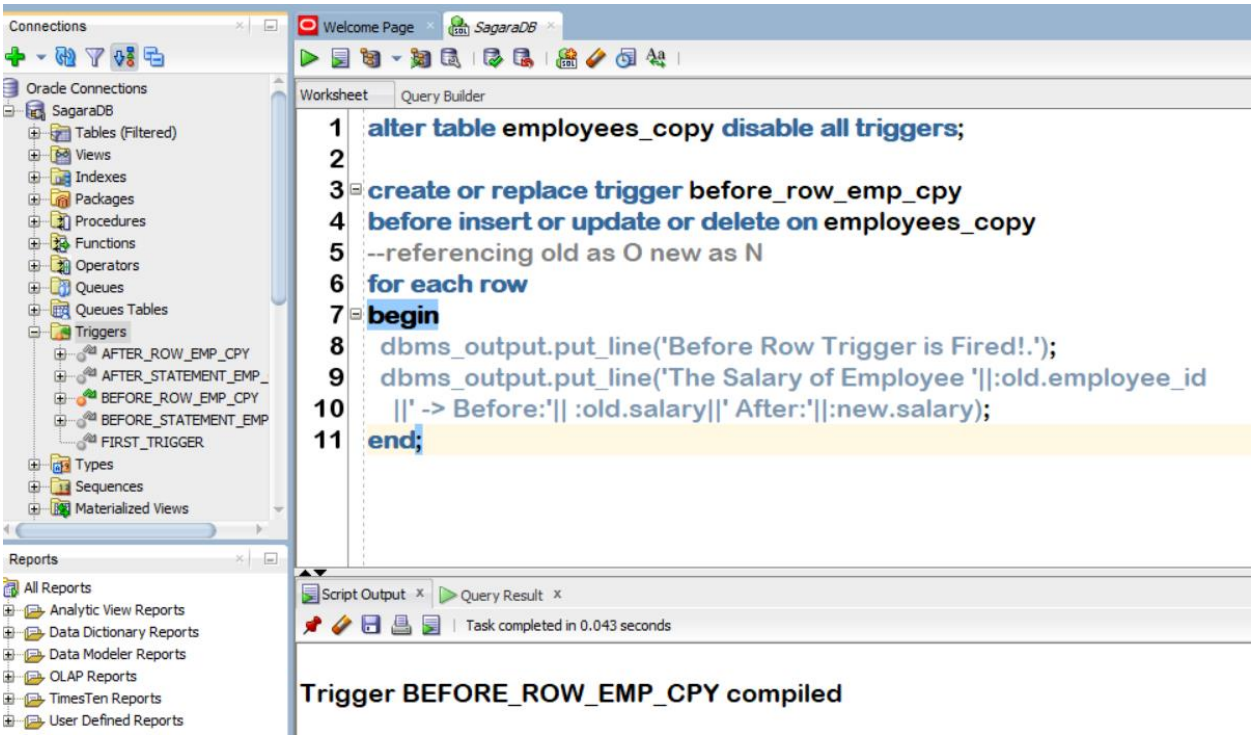
Query Builder
1
alter table employees_copy disable all triggers;
Script Output
Query Result
Task completed in 0.04 seconds
Table EMPLOYEES_COPY altered.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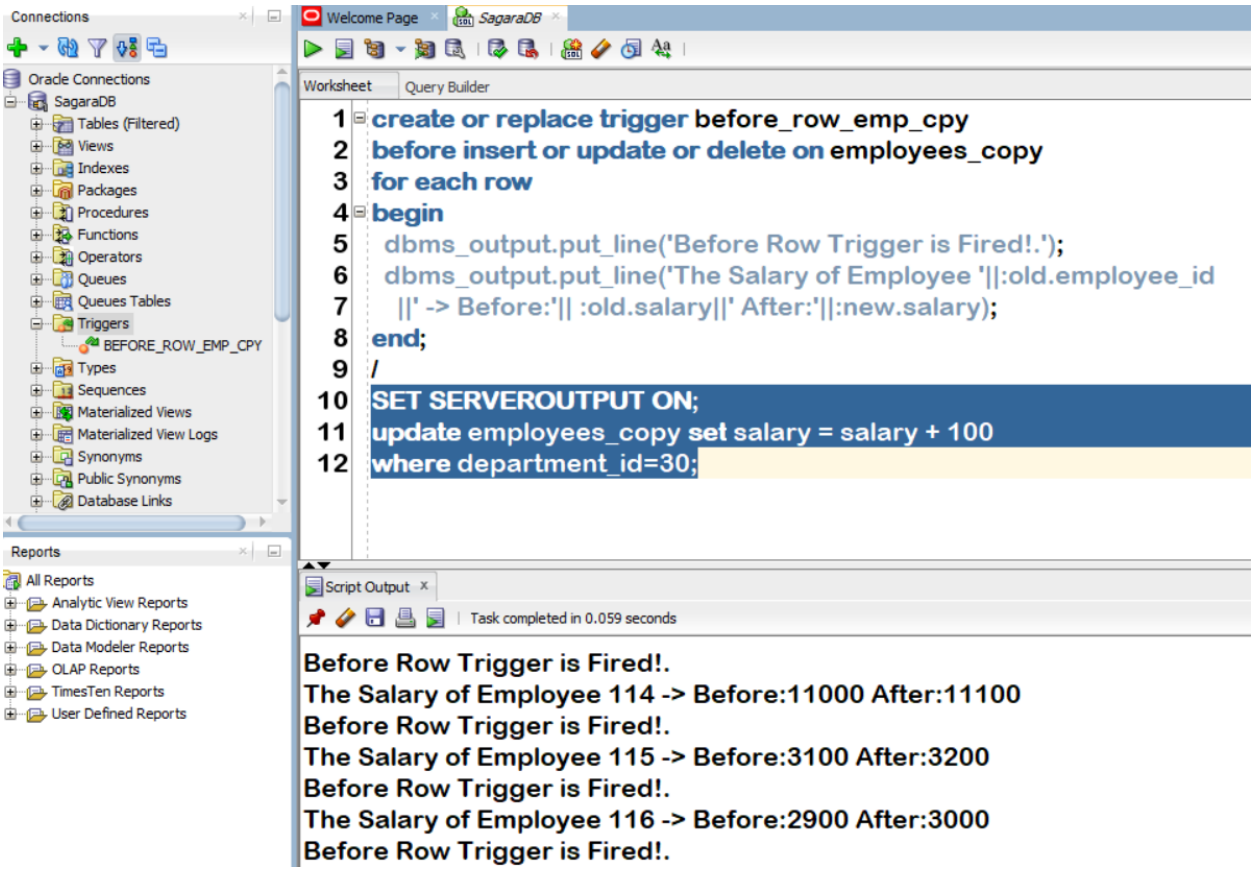
Query Builder
1 alter table employees_copy disable all triggers;
2
3 create or replace trigger before_row_emp_cpy
4 before insert or update or delete on employees_copy
5 --referencing old as O new as N
6 for each row
7 begin
8 dbms_output.put_line('Before Row Trigger is Fired!.');
9 dbms_output.put_line('The Salary of Employee '||:old.employee_id
10 ||' -> Before:'|| :old.salary||' After:'||:new.salary);
11 end;
Script Output
Query Result
Task completed in 0.043 seconds
Trigger BEFORE_ROW_EMP_CPY compiled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Query Builder
1 create or replace trigger before_row_emp_cpy
2 before insert or update or delete on employees_copy
3 for each row
4 begin
5 dbms_output.put_line('Before Row Trigger is Fired!.');
6 dbms_output.put_line('The Salary of Employee '||:old.employee_id
7 ||' -> Before:'|| :old.salary||' After:'||:new.salary);
8 end;
9 /
10 SET SERVEROUTPUT ON;
11 update employees_copy set salary = salary + 100
12 where department_id=30;
Script Output
Task completed in 0.059 seconds
Before Row Trigger is Fired!.
The Salary of Employee 114 -> Before:11000 After:11100
Before Row Trigger is Fired!.
The Salary of Employee 115 -> Before:3100 After:3200
Before Row Trigger is Fired!.
The Salary of Employee 116 -> Before:2900 After:3000
Before Row Trigger is Fired!.