First Trigger:
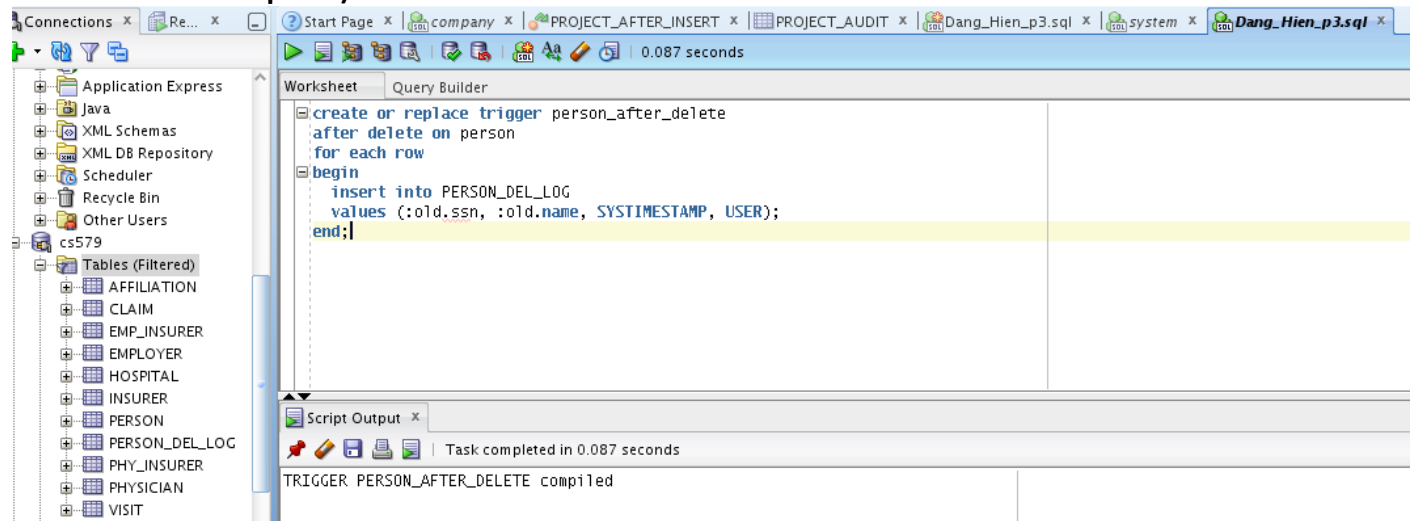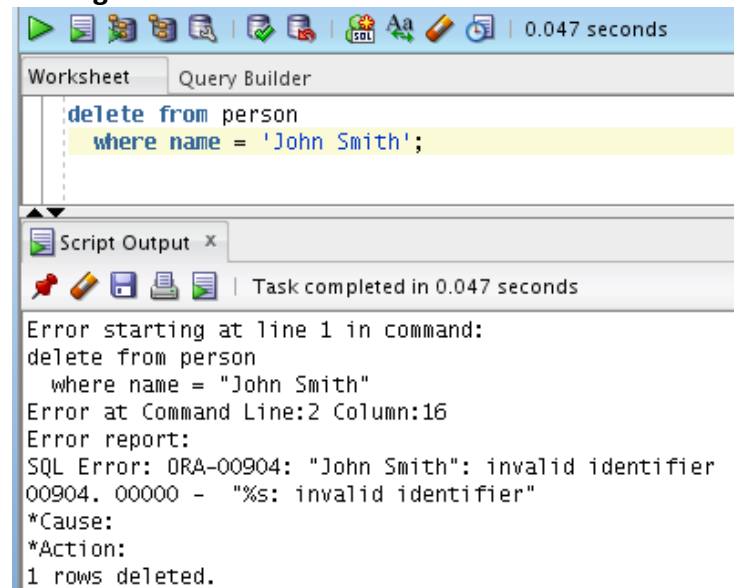
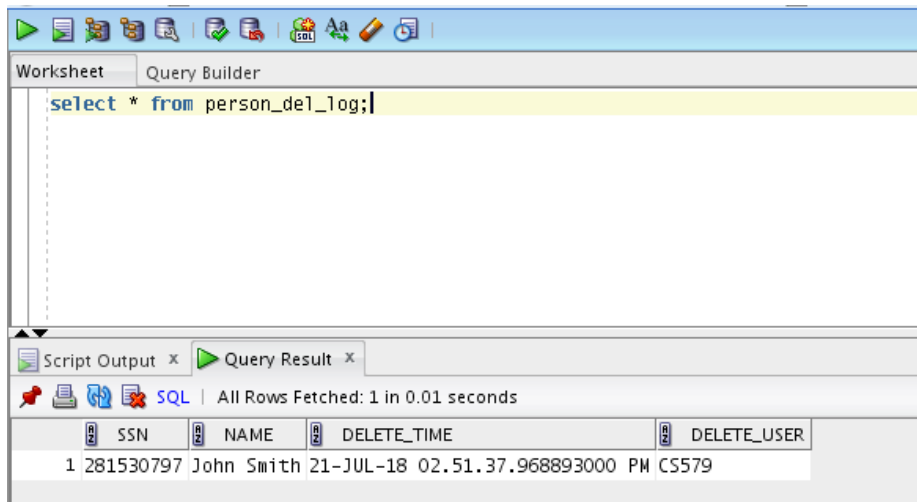**Trigger is compiled: (Note: PERSON_DEL_LOG table was created and can be seen on the schema on the left panel)**

```
create or replace trigger person_after_delete
after delete on person
for each row
begin
    insert into PERSON_DEL_LOG
    values (:old.ssn, :old.name, SYSTIMESTAMP, USER);
end;
```
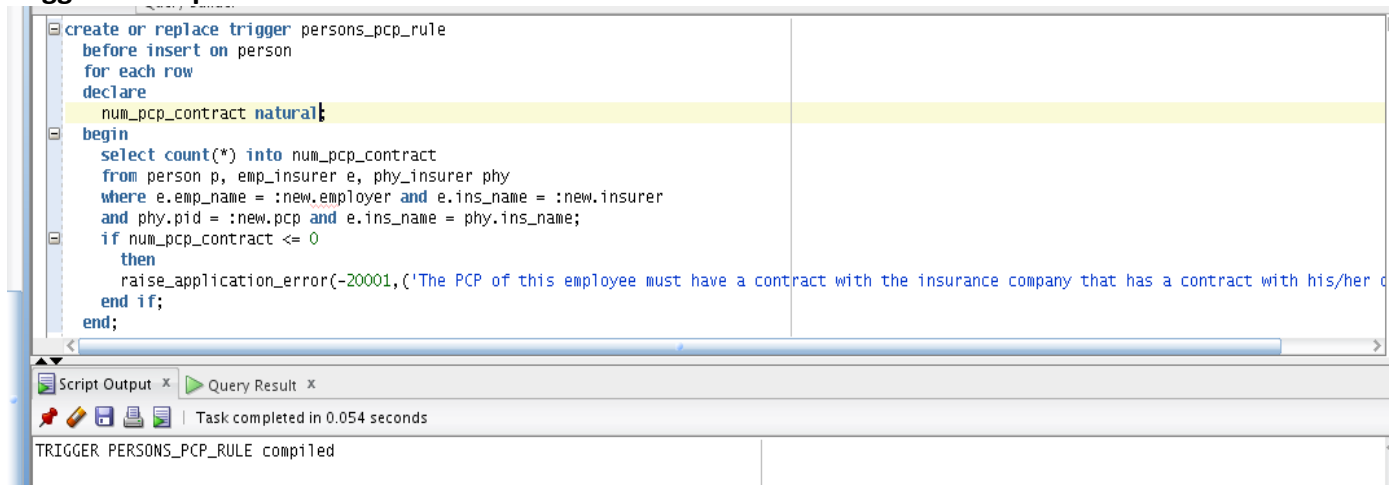
Script Output X

Task completed in 0.087 seconds

```
TRIGGER PERSON_AFTER_DELETE compiled
```

Testing:

0.047 seconds

Worksheet   Query Builder

```
delete from person
    where name = 'John Smith';
```

Script Output X

Task completed in 0.047 seconds

```
Error starting at line 1 in command:
delete from person
    where name = "John Smith"
Error at Command Line:2 Column:16
Error report:
SQL Error: ORA-00904: "John Smith": invalid identifier
00904. 00000 -  "%s: invalid identifier"
*Cause:
*Action:
1 rows deleted.
```

Result:

Second Trigger:

Trigger is complied

```
create or replace trigger persons_pcp_rule
    before insert on person
    for each row
    declare
      num_pcp_contract natural;
    begin
      select count(*) into num_pcp_contract
      from person p, emp_insurer e, phy_insurer phy
      where e.emp_name = :new.employer and e.ins_name = :new.insurer
      and phy.pid = :new.pcp and e.ins_name = phy.ins_name;
      if num_pcp_contract <= 0
        then
        raise_application_error(-20001,('The PCP of this employee must have a contract with the insurance company that has a contract with his/her
      end if;
    end;
```

Script Output × | Query Result ×

Task completed in 0.054 seconds

```
TRIGGER PERSONS_PCP_RULE compiled
```

Test 1: Inserted successfully

```
/* Test 1: Inserted successfully - physician '528236' has contract with Aetna Group which has a contract with Kirlin Ltd*/
insert into person values ('369034090', 'Daniel Berry', '129-827-4928', '4835 2nd Place', 'Kirlin Ltd','Aetna Group', '528236');
```

Script Output × | Query Result ×

Task completed in 0.007 seconds

```
1 rows inserted.
```

Test 2: Throwing an error

```
/* Test 2 – throwing an error – physician '528236' has contract with Aetna Group which doesnt have a contract with Kohler Inc */
insert into person values ('773165355', 'Kevin Jones', '621-199-8245', '13 Sauthoff Circle', 'Kohler Inc', 'Aetna Group', '528236');
```

Script Output ×   Query Result ×

Task completed in 0.018 seconds

```
Error starting at line 2 in command:
insert into person values ('773165355', 'Kevin Jones', '621-199-8245', '13 Sauthoff Circle', 'Kohler Inc', 'Aetna Group', '528236')
Error report:
SQL Error: ORA-20001: The PCP of this employee must have a contract with the insurance company that has a contract with his/her company
ORA-06512: at "CS579.PERSONS_PCP_RULE", line 10
ORA-04088: error during execution of trigger 'CS579.PERSONS_PCP_RULE'
```

Third Trigger:

Trigger is complied

Start Page ×   company ×   PROJECT_AFTER_INSERT ×   PERSON_DEL_LOG ×   Dang_Hien_p3.

0.058 seconds

Worksheet   Query Builder
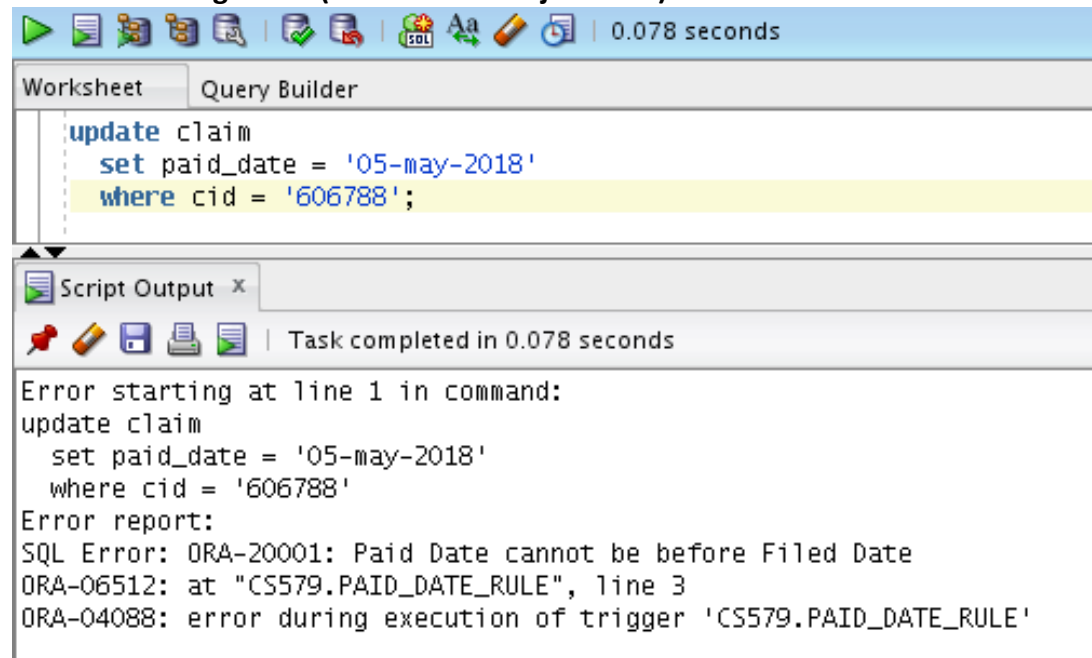
```
create or replace trigger paid_date_rule
    before
    update of paid_date
      on claim
    for each row
    begin
      if :new.paid_date < :old.file_date then
        raise_application_error(-20001, ('Paid Date cannot be before Filed Date'));
      end if;
    end;
```

Script Output ×

Task completed in 0.058 seconds

```
TRIGGER PAID_DATE_RULE compiled
```

Test 1: throwing error: (Filed Date is 11-jun-2018)

```
update claim
    set paid_date = '05-may-2018'
    where cid = '606788';
```
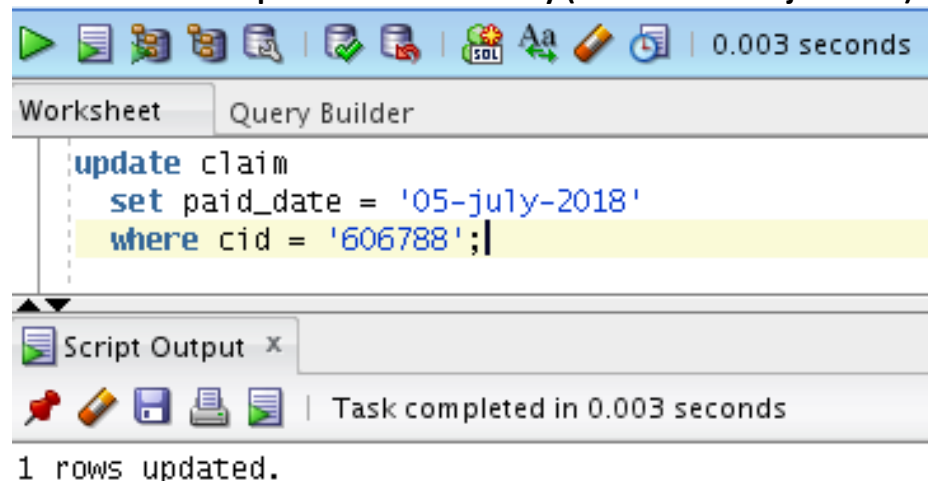
Script Output ×

Task completed in 0.078 seconds

```
Error starting at line 1 in command:
update claim
  set paid_date = '05-may-2018'
  where cid = '606788'
Error report:
SQL Error: ORA-20001: Paid Date cannot be before Filed Date
ORA-06512: at "CS579.PAID_DATE_RULE", line 3
ORA-04088: error during execution of trigger 'CS579.PAID_DATE_RULE'
```

Test 2: No error: Update row successfully (Filed Date is 11-jun-2018)

```
update claim
    set paid_date = '05-july-2018'
    where cid = '606788';
```

Script Output ×

Task completed in 0.003 seconds

```
1 rows updated.
```

Fourth Trigger:

Trigger is complied
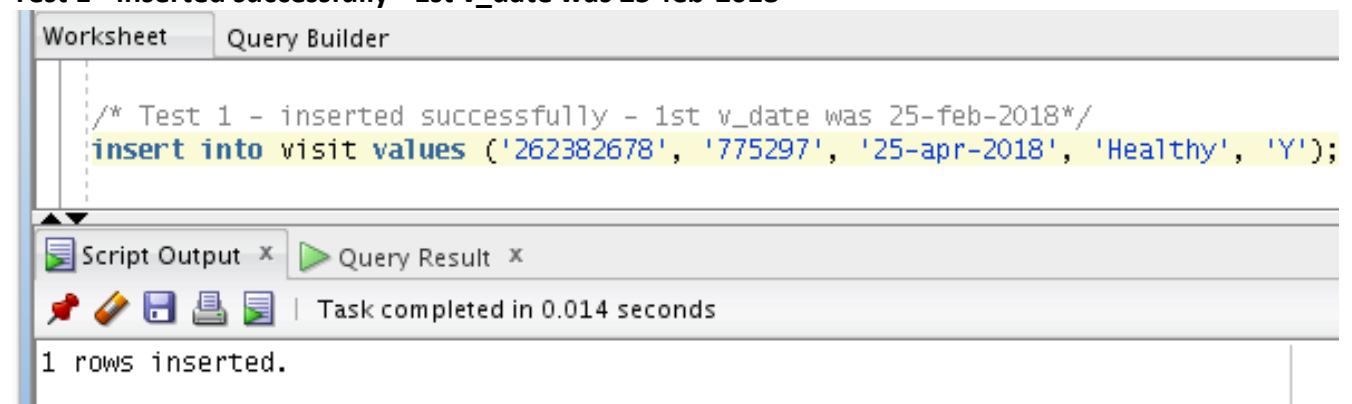
```
create or replace trigger pcp_visit_rule
    before insert on visit
    for each row
    declare
    num_visits natural;
    begin
      select count(*) into num_visits
      from visit
      where ssn = :new.ssn and pid = :new.pid and :new.pcp_or_not = 'Y' and (:new.v_date - v_date) <= 30;
      if num_visits > 0 then
        raise_application_error(-20001, ('Employee' || :new.ssn || 'cannot visit the his/her pcp within 30 days'));
      end if;
    end;
```

Script Output × | Query Result ×

Task completed in 0.03 seconds

```
TRIGGER PCP_VISIT_RULE compiled
```

Test 1 - inserted successfully - 1st v_date was 25-feb-2018

```
/* Test 1 - inserted successfully - 1st v_date was 25-feb-2018*/
insert into visit values ('262382678', '775297', '25-apr-2018', 'Healthy', 'Y');
```

Script Output × | Query Result ×

Task completed in 0.014 seconds

```
1 rows inserted.
```

Test 2 - throwing error - 1st v_date was 25-feb-2018

Worksheet	Query Builder

```
/* Test 2 - throwing error - 1st v_date was 25-feb-2018 */
insert into visit values ('262382678', '775297', '10-mar-2018', 'Healthy', 'Y');
```

Script Output ✕ ▶ Query Result ✕

📌 ✏ 💾 🖨 📋 | Task completed in 0.028 seconds

```
Error starting at line 3 in command:
insert into visit values ('262382678', '775297', '10-mar-2018', 'Healthy', 'Y')
Error report:
SQL Error: ORA-20001: Employee 262382678 cannot visit the his/her pcp within 30 days
ORA-06512: at "CS579.PCP_VISIT_RULE", line 8
ORA-04088: error during execution of trigger 'CS579.PCP_VISIT_RULE'
```