1.       Build a procedure that receives by parameter a calendar year (e.g., 2018). The salaries of employees who brokered at least 3 orders in that year will be increased by 10%. The number of increased salaries will be returned by a parameter. If no employee has brokered orders in that year, an exception will be raised. The procedure will be called from an anonymous block where the exception raised in the procedure will be dealt with.

CREATE OR REPLACE PROCEDURE proc( p\_year number,p\_no OUT number) is

n number;

BEGIN

update employees

set salary=salary\*1.1

where employee\_id in (select sales\_rep\_id from orders where employee\_id=sales\_rep\_id and p\_year=EXTRACT(YEAR FROM ORDER\_DATE) group by sales\_rep\_id having count(order\_id)>=3);

p\_no:=SQL%ROWCOUNT;

end;

/

set serveroutput on

declare

no\_salary EXCEPTION;

n number;

begin

proc(2018,n);

SYS.dbms\_output.put\_line('NO. Salaries increased: '||n|| '.');

IF SQL%NOTFOUND THEN

RAISE no\_salary;

end if;

EXCEPTION WHEN no\_salary THEN

dbms\_output.put\_line('No update!');

WHEN OTHERS THEN

dbms\_output.put\_line('Another error!');

end;

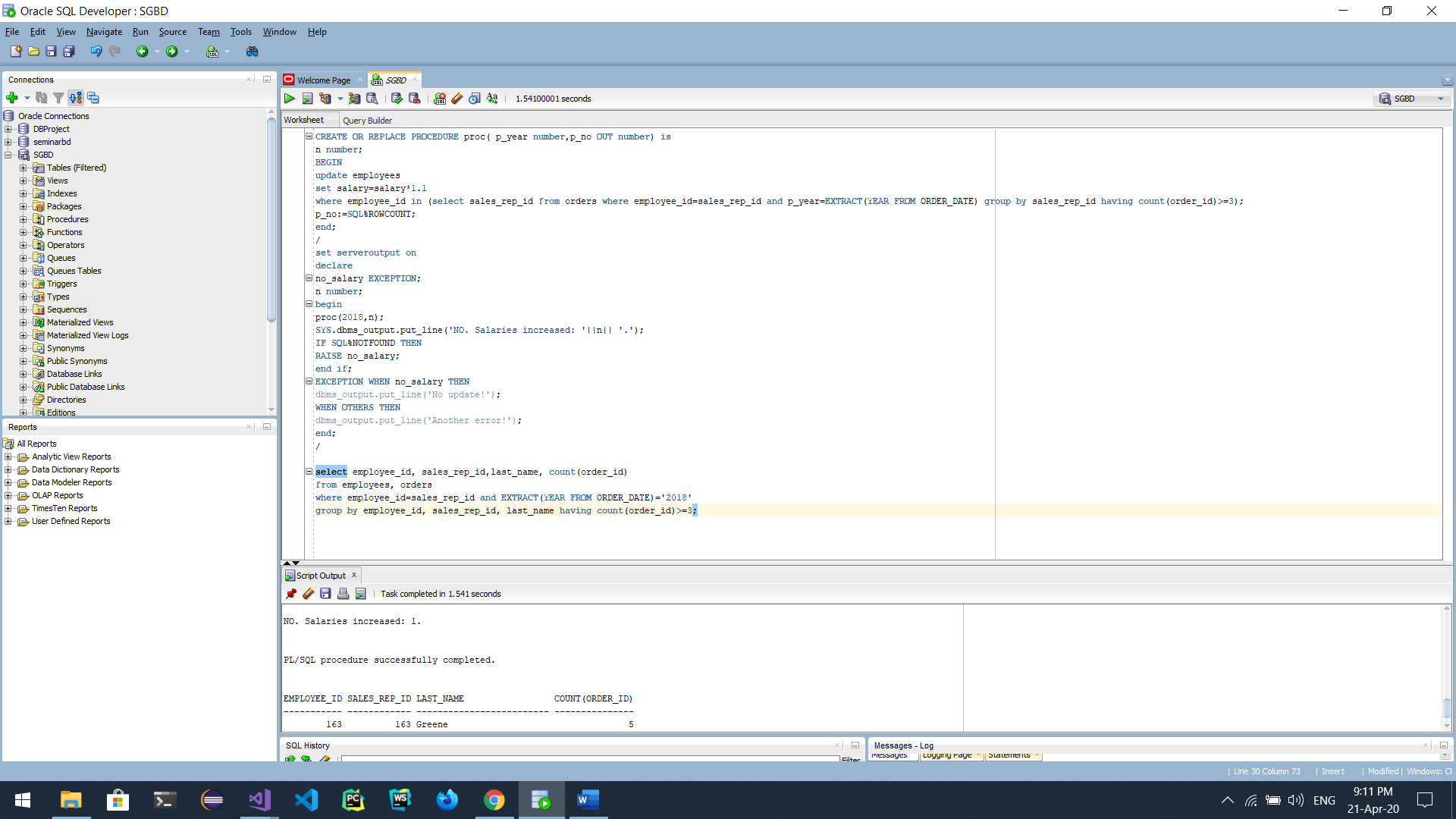
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select employee\_id, sales\_rep\_id,last\_name, count(order\_id)

from employees, orders

where employee\_id=sales\_rep\_id and EXTRACT(YEAR FROM ORDER\_DATE)='2018'

group by employee\_id, sales\_rep\_id, last\_name having count(order\_id)>=3;



2.       Build a function that receives a product's id and deletes that product. If that product cannot be deleted because it appears on the orders, those rows (order\_items) will be deleted first.  The function will return YES if the product exists and has been deleted and NO otherwise. Call the function from an anonymous block.

CREATE OR REPLACE FUNCTION DELETE\_PRODUCT (P NUMBER)

RETURN VARCHAR IS

X VARCHAR2(5);

BEGIN

DELETE FROM ORDER\_ITEMS WHERE PRODUCT\_ID=P;

DELETE FROM PRODUCT\_INFORMATION WHERE PRODUCT\_ID=P;

IF SQL%ROWCOUNT=1

THEN

X:='YES';

RETURN X;

ELSE X:='NO';

RETURN X;

END IF;

END DELETE\_PRODUCT;

/

SET SERVEROUTPUT ON

DECLARE

DP VARCHAR2(5);

BEGIN

DP:=DELETE\_PRODUCT(55555);

DBMS\_OUTPUT.PUT\_LINE(DP);

END;

/

ROLLBACK;

