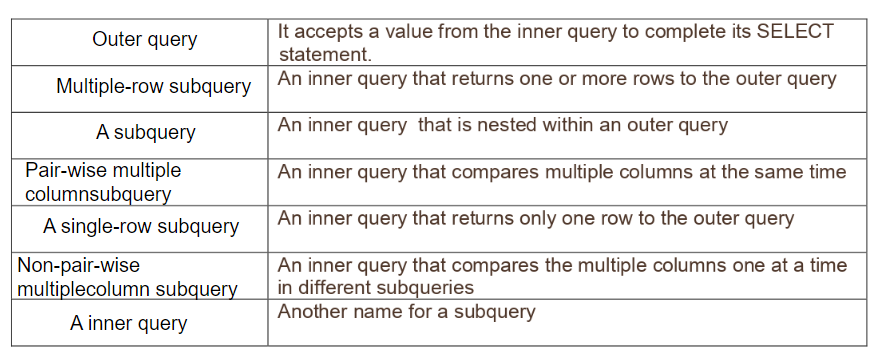
INGENIERÍA EN SISTEMAS ESTRATÉGICOS DE INFORMACIÓN

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| --- | --- | --- | --- | --- | --- |
| **Subject:** | Administración de Dase de Datos SQL (DML) | | | | |
| **Group ID:** | ISC06B | | **Date:** | Oct 26th, 2022 | |
| **Type of Evaluation**  (Mark “X” according the one it matches) | **Diagnostic** |  | **Unit:** | 1 | **Score** |
| **Formative** |  |  |
| **Summative** | X | **Time (hours):** | 2 |
| **1st Chance** |  |
| **Teacher:** | | Juan Carlos Herrera Hernández | | |

Student’s name: Daniel Garcia de Luna Student Id #: UP200423

Student’s name: Juan Jose Rojas Cornejo Student Id #: UP200760

Student’s name: Juan Pablo Rodriguez Serna Student Id #: UP200512



1. What is the purpose of using a subquery? First, to extract the information in between, we need to extract the information we want to extract first.
2. What is a subquery? A consultation already done, added to another outpatient consultation.

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| Problem No: 1 | No. Rows in Result: |
| Cree las tablas adicionales que se utilizan en esta sección ejecutando las siguientes sentencias | 3 |
| Text Code (No image) : | |
| CREATE TABLE emp as SELECT \*  from employees;  CREATE TABLE dept as SELECT \*  FROM departments; | |
| Image Result: | |
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| Problem No: 2 | No. Rows in Result: |
| Cree un informe que muestre el nombre de restricción, el tipo, el nombre de columna y la posición de columna de todas las restricciones de la tabla JOB\_HISTORY, además de las restricciones no nulas | 11 |
| Text Code (No image) : | |
| select constraint\_name "NOMBRE DE RESTRICCION", constraint\_type "TIPO", column\_name "NOMBRE DE COLUMNA"  ,position "POSICION" ,search\_condition "RESTRICCIONES NO NULAS"  from info\_2  where not(constraint\_type = 'R'  and column\_name in  (select column\_name  from user\_tab\_columns  where table\_name = upper('job\_history')  and nullable = 'P')  and dbms\_lob.compare(search\_condition,  concat('"', concat(column\_name, '" is not null'))) = 0); | |
| Image Result: | |
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| Problem No: 3 | No. Rows in Result: |
| Cree una restriccion de clave primaria en la columna employee\_id de la tabla emp. | 1 |
| Text Code (No image) : | |
| alter table emp  add constraint emp\_employee\_id\_pk primary key(employee\_id); | |
| Image Result: | |
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| Problem No: 4 | No. Rows in Result: |
| Cree una clave primaria en la columna department\_id de la tabla dept. | 1 |
| Text Code (No image) : | |
| alter table dept  add constraint dept\_department\_id\_pk primary key (department\_id)  --consulta:  select constraint\_name, constraint\_type, table\_name, status, index\_name  from user\_constraints  where table\_name = upper('dept') or constraint\_type = 'p' or constraint\_type = 'c'; | |
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| Problem No: 5 | No. Rows in Result: |
| Agregue una restriccion ajena entre DEPT Y EMP, de modo que solo se pueden introducir departamentos validos en la tabla EMP. Asegurese de que puede suprimir cualquier fila de la tabla DEPT y de que se suprimen las filas a las que se hace referencia en la tabla EMP. | 1 |
| Text Code (No image) : | |
| alter table emp add constraint emp\_dept\_departmet\_id\_fk foreign key(department\_id)  references dept(department\_id) on delete cascade; | |
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| Problem No: 6 | No. Rows in Result: |
| Pruebe la restricción de clave ajena que acaba de crear  Cuente el número de filas en la tabla EMP.  Elimine el dapartamento 10 de la tabla dept.  Ahora vuelva a contar los empleados. Deberia haber menos empleados. | 1 |
| Text Code (No image) : | |
| select count(\*) from emp;  delete from dept where department\_id = 10;  select count(\*) from emp; | |
| Image Result: | |
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| Problem No: 7 | No. Rows in Result: |
| Genere un informe que devuelva el apellido, el salario, el número de dapartamento y el salario medio de todos los departamentos en los que el salario es mayor que el salario medio. | 7 |
| Text Code (No image) : | |
| with avg\_sal\_by\_dept as  (select nvl(department\_id, -1) dpt\_id, avg(nvl(salary,0)) avg\_sal  from employees  group by nvl(department\_id, -1))  select emp.last\_name, to\_char (round(emp.salary,2),'$999999') "SALARY", case  when avgqry.dpt\_id = -1 then null  else avgqry.dpt\_id end "DEPARTMENT\_ID",  to\_char(round(avgqry.avg\_sal,2),'$999999') "SALAVG"  from employees emp inner join  (select \*  from avg\_sal\_by\_dept) avgqry on  nvl(emp.department\_id, -1) = avgqry.dpt\_id  where emp.salary > avgqry.avg\_sal; | |
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| Problem No: 8 | No. Rows in Result: |
| Cree una vista denominada V2 que devuelva el salario mas alto, el salario mas bajo, el salario medio y el nombre del departamento. | 8 |
| Text Code (No image) : | |
| create view v2 ("Nombre del departamento", "Lowest Salary", "Highest Salary", "Average Salary") as  select  dpt.department\_name,  to\_char(round(min(nvl(emp.salary,0)),2),'$999999'),  to\_char(round(max(nvl(emp.salary,0)),2),'$999999'),  to\_char(round(avg(nvl(emp.salary,0)),2),'$999999')  from departments dpt left outer join employees emp on dpt.department\_id = emp.department\_id  group by (dpt.department\_id, dpt.department\_name);  --consulta  select \* from v2; | |
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| Problem No: 9 | No. Rows in Result: |
| Cree una vista denominada Dept\_Managers\_view que devuelva una lista de nombres de departamento junto con las iniciales y el apellido del jefe para dicho departamento. Pruebe la vista devolviendo todas sus filas. Asegúrese de que no se pueda actualizar ninguna fila a través de la vista. Pruebe a ejecutar una sentencia UPDATE en la vista. | 8 |
| Text Code (No image) : | |
| create view Dept\_Managers\_view as  select distinct substr(nvl(mgr.first\_name, '\_'),1, 1) || substr(mgr.last\_name,1, 1) initials,  mgr.last\_name surname, dpt.department\_name  from  employees mgr inner join employees emp on mgr.employee\_id = emp.manager\_id  left outer join departments dpt on mgr.department\_id = dpt.department\_id;  --consulta  select department\_name, substr(initials, 1,1) ||'.' || surname"MGR\_NAME"  from Dept\_Managers\_view; | |
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| Problem No: 10 | No. Rows in Result: |
| Cree una secuencia denominada ct\_seq con todos los valores por defecto | 1 |
| Text Code (No image) : | |
| create sequence ct\_seq; | |
| Image Result: | |
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| Problem No: 11 | No. Rows in Result: |
| Examine la siguiente sentencia de inserción y corrija los errores | 1 |
| Text Code (No image) : | |
| insert into dept(department\_id, department\_name, manager\_id, location\_id)  values (60, 'IT', 103, 1400);  insert into emp  (employee\_id, first\_name, last\_name, hire\_date,  job\_id, department\_id)  values  (ct\_seq.nextval, 'Daniel', 'Garcia', sysdate, 'up200123@alumnos.upa.edu.mx', 20); | |
| Image Result: | |
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| Problem No: 12 | No. Rows in Result: |
| Excriba la sentencia SQL para mostrar todas las tablas de usuario que contienen el nombre PRIV | 33 |
| Text Code (No image) : | |
| select table\_name, comments  from dictionary  where regexp\_like(table\_name,upper('priv')); | |
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| Problem No: 13 | No. Rows in Result: |
| Conceda acceso de selección en la tabla EMP y verifique que se ha otorgado mediante la ejecución esta consulta. | 1 |
| Text Code (No image) : | |
| grant select on emp to public; | |
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| Problem No: 14 | No. Rows in Result: |
| Sustituya ?? en la siguiente consulta mediante expresiones regulares para devolver solo los números de la siguiente cadena:  ‘Oracle Academy9547d6905%&^ db apex’, ??, “) regexpreplace FROM DUAL; | 1 |
| Text Code (No image) : | |
| SELECT 'Oracle Academy9547d6905%&^ db apex' original , REGEXP\_REPLACE('Oracle Academy9547d6905%&^ db apex','[^0-9]','') OnlyNumbers  FROM DUAL; | |
| Image Result: | |
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| Problem No: 15 | No. Rows in Result: |
| Corrija la consulta anterior mediante expresiones regulares para devolver el numero de dígitos de la siguiente cadena:  ‘Oracle Academy9547d6905%&^db’ | 1 |
| Text Code (No image) : | |
| SELECT 'Oracle Academy9547d6905%&^ db apex' original , length(REGEXP\_REPLACE('Oracle Academy9547d6905%&^ db apex','[^0-9]','')) Length\_of\_digits  FROM DUAL; | |
| Image Result: | |
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| Problem No: 16 | No. Rows in Result: |
| Corrija la consulta de nuevo para devolver solo los caracteres no numéricos. | 1 |
| Text Code (No image) : | |
| SELECT 'Oracle Academy9547d6905%&^ db apex' original , REGEXP\_REPLACE('Oracle Academy9547d6905%&^ db apex','[0-9]','') no\_digits  FROM DUAL; | |
| Image Result: | |
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| Problem No: 17 | No. Rows in Result: |
| Mediante las uniones propiedad de Oracle, construya una instrucción que devuelva todos los employee\_ids unidos a todos los departament\_names | 160 |
| Text Code (No image) : | |
| select e.employee\_id, d.department\_name  from employees e, departments d; | |
| Image Result: | |
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| Problem No: 18 | No. Rows in Result: |
| Vuelva a utilizar las uniones Oracle para corregir la sentencia anterior de modo que devuelva solo el nombre del departamento en el que esta trabajando el empleado actualmente | 19 |
| Text Code (No image) : | |
| select emp.employee\_id, dept.department\_name  from employees emp, departments dept  where emp.department\_id = dept.department\_id; | |
| Image Result: | |
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| Problem No: 19 | No. Rows in Result: |
| Vuelve a utilizar las uniones Oracle para crear una consulta que muestre el apellido de los empleados, el nombre de departamento, el salario y el nombre del país de todos los empleados | 21 |
| Text Code (No image) : | |
| select e.last\_name, d.department\_name, e.salary, c.country\_name  from employees e, departments d, locations l,countries c  where e.department\_id = d.department\_id  and d.location\_id=l.location\_id  and l.country\_id=c.country\_id; | |
| Image Result: | |
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| Problem No: 20 | No. Rows in Result: |
| Vuelve a utilizer la sintaxis de unión de Oracle para modificar la consulta anterior, de modo que incluya también el registro de empleados sin department\_id, ‘Grant’. | 20 |
| Text Code (No image) : | |
| select e.last\_name, d.department\_name, e.salary, c.country\_name  from employees e left join departments d  on e.department\_id = d.department\_id  left join locations l on d.location\_id=l.location\_id  left join countries c on l.country\_id = c.country\_id; | |
| Image Result: | |
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