



Assignment Answer Sheet

Campus	Pretoria	Faculty	IT
Module Code	ITDIB2-B44	Module Name	
Student Name	Arno Moller		
Student Number	CC96ZRRS5		

Declaration

"I declare that this assignment is my own original work except for source material explicitly acknowledged, and that the same or related material has not been previously, or is being simultaneously, submitted for this or any other course. I also acknowledge that I am aware of the Institution's policy and regulations on honesty in academic work as set out in the Eduvos Conditions of Enrolment, and of the disciplinary guidelines applicable to breaches of such policy and regulations."

Start writing from here

Question 1

1.1) The connectivity problem can be fixed using straightforward tests and procedures:

- Restarting the computer might help.
- Check the app installer's settings.
- Check the disk space that is available meets the requirements.
- Installer should be started in administrative mode.
- Check the system specifications, the appropriate Windows version, and the app compatibility.
- Open a troubleshooter software.
- Any installed previous application versions should be removed.
- Check your antivirus software is up to date and not blocking connections from Oracle Databases

1.2) The only alternative left is to call the help desk for a resolution of the issue. We can also read the handbook or just contact the Oracle Help Desk service, which contact details can be found on their website, to learn more about the program.

1.3) No, there are not any restrictions to only use SQL Developer or SQL PLUS to execute and construct the queries from the tables stored on Oracle database.

1.4) In the database system's tablespace, the views and data dictionary tables are mostly kept. The data dictionary is regarded as a crucial and essential component of the database. Data about the data in the dictionary is referred to as metadata, and it is used to record details about each individual data component in the database.

Question 2

```
2.1) CREATE TABLE Emp(  
    eid int,  
    ename varchar(255),  
    salary int  
);  
CREATE TABLE verify AS  
SELECT eid, ename, salary FROM Emp  
WHERE salary >= 15000;
```

SQL Worksheet

```
1 CREATE TABLE Emp(  
2     eid int,  
3     ename varchar(255),  
4     salary int  
5 );  
6 CREATE TABLE verify AS  
7 SELECT eid, ename, salary FROM Emp  
8 WHERE salary >= 15000;
```

2.2) Firstly find managers salary query

```
SELECT D.managerid, D.did, E.salary  
FROM Dept D, Emp E  
WHERE D.managerid = E.eid;
```

SQL Worksheet

```
1 CREATE TABLE SELECT D.managerid, D.did, E.salary
2 FROM Dept D, Emp E
3 WHERE D.managerid = E.eid;
```

Save the table as ManagersSalary

Query to find the ID of employees whose salary is higher than the manager

```
1 SELECT E.eid
2 FROM Emp E, Works W, ManagersSalary
3 WHERE E.eid = W.eid
4 AND W.did = ManagersSalary.did
5 AND E.salary > ManagersSalary.salary;
```

Table is saved as EmpID

Query to erase all employees in EmpID

```
DELETE FROM Emp
WHERE eid IN (
    SELECT eid FROM EmpID
);
```

SQL Worksheet

```
1 DELETE FROM Emp
2 WHERE eid IN (
3     SELECT eid FROM EmpID
4 );
```

2.3) LIKE operator can not be used with numeric data, instead the data type needs to be changed to a varchar and then the query can be run.

```
SELECT *
FROM Emp
WHERE CONVERT(varchar(20), salary) LIKE '%60%';
```

SQL Worksheet

```
1 SELECT *
2 FROM Emp
3 WHERE CONVERT(varchar(20), salary) LIKE '%60%';
```

```
2.4) SELECT E.ename, W.did
FROM Emp E, Works W
WHERE E.eid = W.eid
ORDER BY W.eid ASC NULLS LAST;
```

SQL Worksheet

```
1 SELECT E.ename, W.did
2 FROM Emp E, Works W
3 WHERE E.eid = W.eid
4 ORDER BY W.eid ASC NULLS LAST;
```

The NULLS LAST operator can be used. Therefore making it possible to provide the results as requested.

```
2.5) SELECT D.dname
FROM Dept D
WHERE D.dname LIKE '%ing';
```

SQL Worksheet

```
1 SELECT D.dname
2 FROM Dept D
3 WHERE D.dname LIKE '%ing';
```

Question 3

3.1)

```
SELECT * FROM STOCKLIST_INFORMATION
WHERE (STOCK_NAME LIKE 'LP%' OR STOCK_NAME LIKE 'CPU%')
AND (PRICE >= R6000 AND PRICE <= R9000)
AND (SPEED = '5x2ghz' OR SPEED = '5x3ghz')
ORDER BY PRICE DESC;
```

SQL Worksheet

```
1 SELECT * FROM STOCKLIST_INFORMATION
2 WHERE (STOCK_NAME LIKE 'LP%' OR STOCK_NAME LIKE 'CPU%')
3 AND (PRICE >= R6000 AND PRICE <= R9000)
4 AND (SPEED = '5x2ghz' OR SPEED = '5x3ghz')
5 ORDER BY PRICE DESC;
```

3.2)

```
select STOCK_NAME, CATALOG_URL
from STOCKLIST_INFORMATION
where STOCK_DESCRIPTION like '%PINK%' and STOCK_DESCRIPTION like '%HANDBAG%'
and CATALOG_URL like '%www.supp%';
```

SQL Worksheet

 Cle

```
1 select STOCK_NAME, CATALOG_URL
2 from STOCKLIST_INFORMATION
3 where STOCK_DESCRIPTION like '%PINK%' and STOCK_DESCRIPTION like '%HANDBAG%'
4 and CATALOG_URL like '%www.supp%';
```

(Microsoft, 2022) (Simplified, 2018)

```
3.3) select PRODUCT_ID, PRODUCT_NAME, PURCHASE_DATE
from PRODUCT
where (PURCHASE_DATE between '01-MAR-2019' and '01-MAR-2022')
and (DATEDIFF(MONTH, PURCHASE_DATE,
GETDATE()) > 36);
```

SQL Worksheet

```
1 select PRODUCT_ID, PRODUCT_NAME, PURCHASE_DATE
2 from PRODUCT
3 where (PURCHASE_DATE between '01-MAR-2019' and '01-MAR-2022')
4 and (DATEDIFF(MONTH, PURCHASE_DATE,
5 GETDATE()) > 36);
```

(Brumm, 2019)

(Brumm, 2019) (Gupta, 2018)

(Heller, 2019) (Malcher, 2019) (Pragada, 2019) (Curry., 2020) (freeCodeCamp.org., 2018)
(Oracle Basics [Online], 2022) (Guru99, 2022)

Bibliography

Brumm, B., 2019. *Beginning Oracle SQL for Oracle Database 18c: From Novice to Professional..* 1st ed. California: Apress Media .

Curry., C., 2020. *Youtube*. [Online]

Available at: https://www.youtube.com/watch?v=1o0c-zD3iFU&ab_channel=CalebCurry
[Accessed 20 11 2022].

freeCodeCamp.org., 2018. *Youtube*. [Online]

Available at:

https://www.youtube.com/watch?v=HXV3zeQKqGY&ab_channel=freeCodeCamp.org
[Accessed 21 11 2022].

Gupta, S., 2018. *racle Database 18c: New Features: New Features for DBAs and Developers..* 1st ed. s.l.:Independently published.

Guru99, 2022. *Guru99*. [Online]

Available at: <https://www.guru99.com/sql.html>
[Accessed 18 11 2022].

Heller, J., 2019. *Pro SQL Development: Best Practices for Writing Advanced Queries..* 1st ed. s.l.:Apress Media.

Malcher, M. & K. D., 2019. *Pro Oracle Database 18c Administration: Managing and Safeguarding your Organization's Data..* 3rd ed. s.l.:Apress Media.

Microsoft, 2022. *Microsoft*. [Online]

Available at: <https://learn.microsoft.com/en-us/sql/t-sql/lesson-1-creating-database-objects?view=sql-server-ver16>
[Accessed 15 11 2022].

Oracle Basics [Online], 2022. *Oracle Basics [Online]*. [Online]

Available at: <https://www.oracletutorial.com/oracle-basics/>
[Accessed 19 11 2022].

Pragada, S., 2019. *YouTube How to use SQL Developer with Oracle Database*. [Online]

Available at: https://www.youtube.com/watch?v=oQ92BaGuvdl&ab_channel=srikanthpragada
[Accessed 20 11 2022].

Simplified, 2018. *Youtbe*. [Online]

Available at: https://www.youtube.com/watch?v=oReH2vO8lzc&ab_channel=Simplified
[Accessed 18 11 2022].

