

Department:Computer Engineering & Applications

Subject: Database Management System
Lab (CSE3083)

ASSIGNMENT 03

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DATE - 11 AUGUST 2020

Course: B.Tech. (CSE)

Year: 2nd Semester : 3rd

SUBMITTED TO - DR. NEERAJ GUPTA

APPLY

https://livesql.oracle.com/apex/f?p=590:200:10079563199760::200:P200_ID:43039417&cs=338_5goRDDGfoNfHndROubKQZPbYfL5kpgfT2a5w1ga6-tl...

Live SQL

Schema \ APPLY

Show All Table Attributes Columns Indexes Triggers Constraints

			Length	Precision	Scale	Nullable	Semantics	Comment
1	SID	NUMBER	22		0	No		
2	CNAME	VARCHAR2	10			No	Byte	
3	MAJOR	VARCHAR2	20			No	Byte	
4	DECISION	CHAR	1			Yes	Byte	

Indexes

Index Name	Index Type	Uniqueness	Status	Columns
SYS_C0035319345	NORMAL	UNIQUE	VALID	SID, MAJOR, CNAME

Triggers

No triggers defined.

Constraints

Constraint	Type	Condition	On Delete	Status	Last Change	Invalid?
CNAME_FK	Foreign Key	-	NO ACTION	ENABLED	61 seconds ago	-
SID_FK	Foreign Key	-	NO ACTION	ENABLED	61 seconds ago	-
SYS_C0035319345	Primary Key	-	-	ENABLED	61 seconds ago	-

COLLEGE

https://livesql.oracle.com/apex/f?p=590:200:10079563199760::200:P200_ID:43039409&cs=3ypADbSX09AxL2N4MRc78RuQtyM_dTWYHk4GRspR-Fslc-...

Live SQL

Schema \ COLLEGE

Show All Table Attributes Columns Indexes Triggers Constraints

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	COLLEGENAME	VARCHAR2	10			No	Byte	
2	STATE	VARCHAR2	10			Yes	Byte	
3	ENROLLMENT	NUMBER	22		0	Yes		

Indexes

Index Name	Index Type	Uniqueness	Status	Columns
SYS_C0035319343	NORMAL	UNIQUE	VALID	COLLEGENAME

Triggers

No triggers defined.

Constraints

Constraint	Type	Condition	On Delete	Status	Last Change	Invalid?
SYS_C0035319343	Primary Key	-	-	ENABLED	4 minutes ago	-

STUDENT

Schema \ SQL_FVPSPCCDFWKLXVOKLEMMRTEL

Syntax Help Actions View All Objects

Show All Table Attributes Columns Indexes Triggers Constraints

#	Column	Type	Length	Precision	Scale	Nullable	Semantics	Comment
1	SID	NUMBER	22		0	No		
2	SNAME	VARCHAR2	10			Yes	Byte	
3	GPA	FLOAT	22	63		Yes		
4	SIZEHS	NUMBER	22		0	Yes		

Indexes

Index Name	Index Type	Uniqueness	Status	Columns
SYS_C0035319344	NORMAL	UNIQUE	VALID	SID

Triggers

No triggers defined.

Constraints

Constraint	Type	Condition	On Delete	Status	Last Change	Invalid?
SYS_C0035319344	Primary Key	-	-	ENABLED	4 minutes ago	-

Query 1:--

Oracle Live SQL - SQL Worksheet

Clear Find Actions Save Run

```

1 -- QUERY 1
2 SELECT *
3 FROM
4 STUDENT, APPLY
5 ORDER BY STUDENT.SID;
6

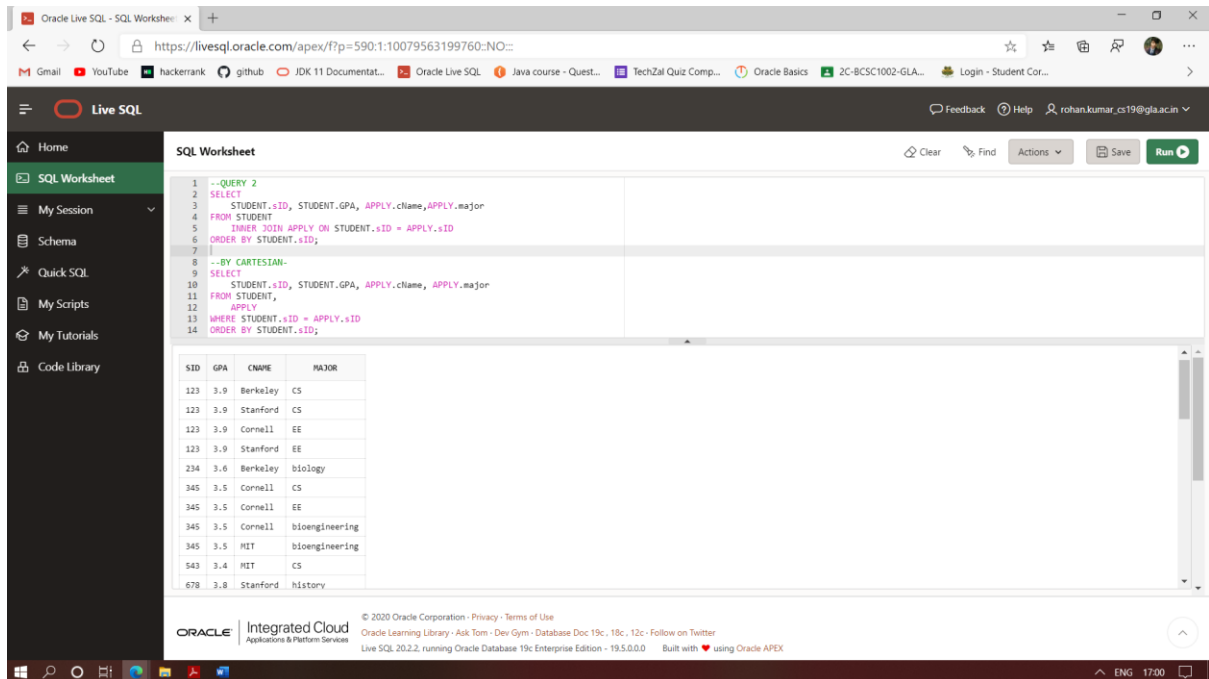
```

SID	SNAME	GPA	SIZEHS	SID	CNAME	MAJOR	DECISION
123	Any	3.9	1000	123	Stanford	CS	Y
123	Any	3.9	1000	543	MIT	CS	N
123	Any	3.9	1000	123	Berkeley	CS	Y
123	Any	3.9	1000	123	Cornell	EE	Y
123	Any	3.9	1000	234	Berkeley	biology	N
123	Any	3.9	1000	345	MIT	bioengineering	Y
123	Any	3.9	1000	345	Cornell	bioengineering	N
123	Any	3.9	1000	345	Cornell	CS	Y
123	Any	3.9	1000	345	Cornell	EE	N
123	Any	3.9	1000	678	Stanford	history	Y
123	Any	3.9	1000	987	Stanford	CS	Y
123	Any	3.9	1000	987	Berkeley	CS	Y
123	Any	3.9	1000	876	Stanford	CS	N

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QUERY 2:-



Oracle Live SQL - SQL Worksheet

SQL Worksheet

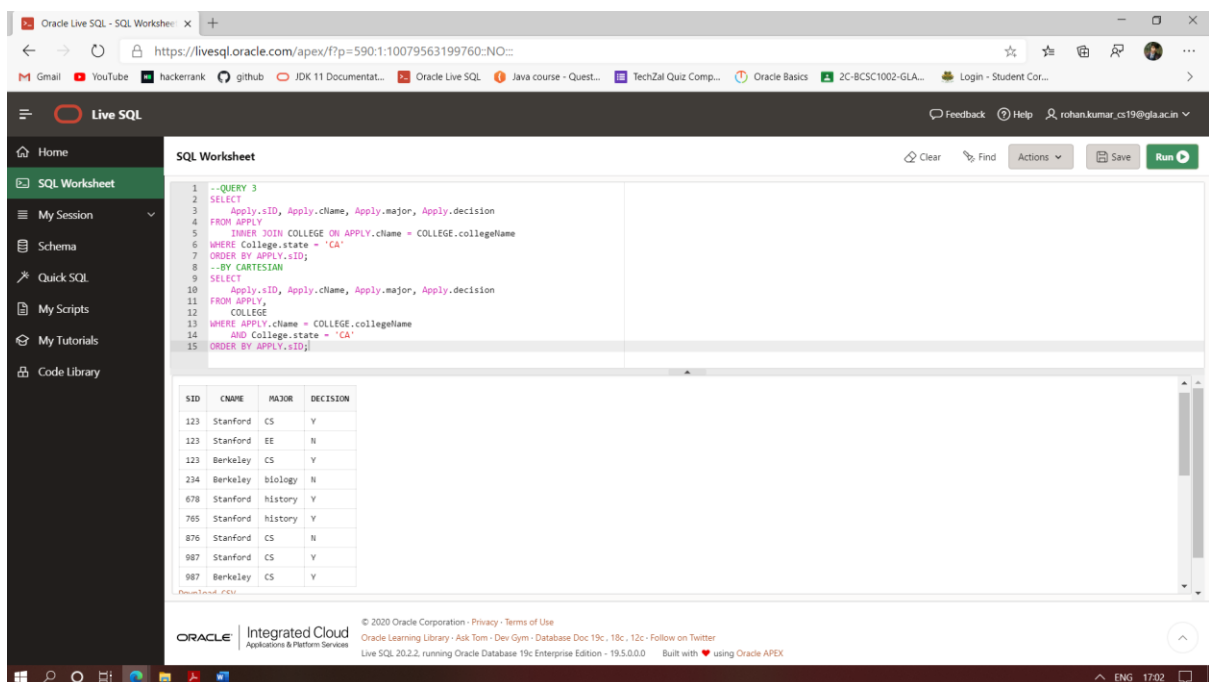
```
1 --QUERY 2
2 SELECT
3   STUDENT.sID, STUDENT.GPA, APPLY.cName,APPLY.major
4 FROM STUDENT
5 INNER JOIN APPLY ON STUDENT.sID = APPLY.sID
6 ORDER BY STUDENT.sID;
```

SID	GPA	CNAME	MAJOR
123	3.9	Berkeley	CS
123	3.9	Stanford	CS
123	3.9	Cornell	EE
123	3.9	Stanford	EE
234	3.6	Berkeley	biology
345	3.5	Cornell	CS
345	3.5	Cornell	EE
345	3.5	Cornell	bioengineering
345	3.5	HIT	bioengineering
543	3.4	HIT	CS
678	3.8	Stanford	history

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QUERY 3 –



Oracle Live SQL - SQL Worksheet

SQL Worksheet

```
1 --QUERY 3
2 SELECT
3   Apply.sID, Apply.cName, Apply.major, Apply.decision
4 FROM APPLY
5 INNER JOIN COLLEGE ON APPLY.cName = COLLEGE.collegeName
6 WHERE College.state = 'CA'
7 ORDER BY APPLY.sID;
8 --BY CARTESIAN
9 SELECT
10  Apply.sID, Apply.cName, Apply.major, Apply.decision
11 FROM APPLY,
12 COLLEGE
13 WHERE APPLY.cName = COLLEGE.collegeName
14 AND College.state = 'CA'
15 ORDER BY APPLY.sID;
```

SID	CNAME	MAJOR	DECISION
123	Stanford	CS	Y
123	Stanford	EE	N
123	Berkeley	CS	Y
234	Berkeley	biology	N
678	Stanford	history	Y
765	Stanford	history	Y
876	Stanford	CS	N
987	Stanford	CS	Y
987	Berkeley	CS	Y

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QUERY 4 –

Oracle Live SQL - SQL Worksheet

https://livesql.oracle.com/apex/?p=590:1:10079563199760:NO...

Live SQL

SQL Worksheet

```

1 --QUERY 4
2 SELECT DISTINCT
3   STUDENT.sID, STUDENT.sName, STUDENT.GPA, APPLY.cName
4 FROM STUDENT
5 INNER JOIN APPLY ON STUDENT.sID = APPLY.sID
6 WHERE STUDENT.GPA > 3.7
7 AND APPLY.cName = 'Stanford'
8 ORDER BY STUDENT.sID;
9
10 --BY CARTESIAN
11 SELECT DISTINCT
12   STUDENT.sID, STUDENT.sName, STUDENT.GPA, APPLY.cName
13 FROM STUDENT,
14 APPLY
15 WHERE STUDENT.sID = APPLY.sID
16 AND STUDENT.GPA > 3.7
17 AND APPLY.cName = 'Stanford'
18 ORDER BY STUDENT.sID;

```

Resize Code Editor

SID	SNAME	GPA	CNAME
123	Amy	3.9	Stanford
678	Fay	3.8	Stanford
876	Irene	3.9	Stanford

Download CSV
3 rows selected.

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QUERY 5--

Oracle Live SQL - SQL Worksheet

https://livesql.oracle.com/apex/?p=590:1:10079563199760:NO...

Live SQL

SQL Worksheet

```

1 --QUERY 5
2 SELECT
3   STUDENT.sID, STUDENT.sName, STUDENT.GPA, STUDENT.sizeHS
4 FROM STUDENT
5 INNER JOIN APPLY ON STUDENT.sID = APPLY.sID
6 WHERE APPLY.decision = 'N'
7 AND APPLY.major = 'CS'
8 ORDER BY STUDENT.sID;
9
10 --BY CARTESIAN
11 SELECT
12   STUDENT.sID, STUDENT.sName, STUDENT.GPA, STUDENT.sizeHS
13 FROM STUDENT,
14 APPLY
15 WHERE STUDENT.sID = APPLY.sID
16 AND APPLY.decision = 'N'
17 AND APPLY.major = 'CS'
18 ORDER BY STUDENT.sID;

```

SID	SNAME	GPA	SIZEHS
543	Craig	3.4	2800
876	Irene	3.9	400

Download CSV
2 rows selected.

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QUERY 6—

Oracle Live SQL - SQL Worksheet

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Live SQL

SQL Worksheet

```

1 -- QUERY 6
2 SELECT
3     STUDENT.sID, STUDENT.sName, STUDENT.GPA, STUDENT.sizeHS,
4     Apply.cName, Apply.major, Apply.decision
5 FROM STUDENT
6 INNER JOIN APPLY ON STUDENT.sID = APPLY.sID
7 INNER JOIN COLLEGE ON COLLEGE.collegeName = APPLY.cName
8 WHERE COLLEGE.state = 'NY'
9 ORDER BY STUDENT.sID;
10 --BY CARTESIAN
11 SELECT
12     Student.sID, Student.sName, Student.GPA, Student.sizeHS,
13     Apply.cName, Apply.major, Apply.decision
14 FROM Student,
15     Apply,
16     College
17 WHERE Student.sID = Apply.sID
18 AND Apply.cName = College.collegeName
19 AND College.state = 'NY';

```

SID	SNAME	GPA	SIZEHS	CNAME	MAJOR	DECISION
123	Any	3.9	1000	Cornell	EE	Y
345	Craig	3.5	500	Cornell	bioengineering	N
345	Craig	3.5	500	Cornell	CS	Y
345	Craig	3.5	500	Cornell	EE	N
765	Jay	2.9	1500	Cornell	history	N
765	Jay	2.9	1500	Cornell	psychology	Y

Download CSV

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QUERY 7—

Oracle Live SQL - SQL Worksheet

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Live SQL

SQL Worksheet

```

1 -- QUERY 7
2 SELECT *
3 FROM
4     STUDENT
5 WHERE STUDENT.sID NOT IN (
6     SELECT DISTINCT sID
7     FROM APPLY
8 );
9

```

SID	SNAME	GPA	SIZEHS
567	Eduard	2.9	2000
654	Any	3.9	1000
456	Doris	3.9	1000
789	Gary	3.4	800

Download CSV

4 rows selected.

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QUERY 8--

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area displays the SQL Worksheet for Query 8. The query is as follows:

```
-- QUERY 8
1 SELECT
2 COLLEGE.collegellame
3 FROM
4 COLLEGE
5 WHERE COLLEGE.collegellame NOT IN (
6 SELECT DISTINCT clame
7 FROM APPLY
8 );
9
10
```

The result set shows one row with the value 'Harvard' under the column 'COLLEGENAME'. Below the result set, there is a 'Download CSV' link. The footer of the interface includes the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information for 2020 Oracle Corporation.

QUERY 9-

The screenshot shows the Oracle Live SQL interface. The left sidebar contains navigation links: Home, SQL Worksheet, My Session, Schema, Quick SQL, My Scripts, My Tutorials, and Code Library. The main area displays the SQL Worksheet for Query 9. The query is as follows:

```
-- QUERY 9
1 SELECT *ID
2 FROM APPLY
3 GROUP BY *ID
4 HAVING COUNT(*ID) > 1;
5
```

The result set shows three rows with values '234', '543', and '678' under the column 'SID'. Below the result set, there is a 'Download CSV' link and the text '3 rows selected.'. The footer of the interface includes the Oracle logo, 'Integrated Cloud Applications & Platform Services', and copyright information for 2020 Oracle Corporation.

QUERY 10—

Oracle Live SQL - SQL Worksheet

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Live SQL

SQL Worksheet

```

1 --QUERY 10
2 SELECT DISTINCT
3   STUDENT.sname, STUDENT.GPA
4 FROM STUDENT
5 INNER JOIN APPLY ON STUDENT.sID = APPLY.sID
6 INNER JOIN COLLEGE ON APPLY.cname = COLLEGE.collegeName
7 WHERE enrollment < 25000;
8 --BY CARTESIAN
9 SELECT DISTINCT
10  STUDENT.sname, STUDENT.GPA
11 FROM
12  STUDENT, APPLY, College
13 WHERE STUDENT.sID = APPLY.sID
14       AND APPLY.cname = COLLEGE.collegeName
15       AND COLLEGE.enrollment < 25000;
16

```

SNAME	GPA
Craig	3.4
Amy	3.9
Helen	3.7
Craig	3.5
Fay	3.8
Jay	2.9
Irene	3.9

Download CSV

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QUERY 11--

Oracle Live SQL - SQL Worksheet

https://livesql.oracle.com/apex/?p=590:1:10079563199760:NO...

Live SQL

SQL Worksheet

```

1 --QUERY 11
2 SELECT DISTINCT
3   sID1.sID, sID2.sID
4 FROM STUDENT sID1
5 INNER JOIN STUDENT sID2 ON sID1.GPA = sID2.GPA
6 WHERE sID1.sID != sID2.sID
7       AND sID1.sID > sID2.sID;

```

sID	sID
456	123
876	123
654	123
876	456
654	456
765	567
876	654
789	543

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