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Class → BTech. 2nd Year { E }

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Class RollNo. → '37'

Subject → Database Management
Systems Lab

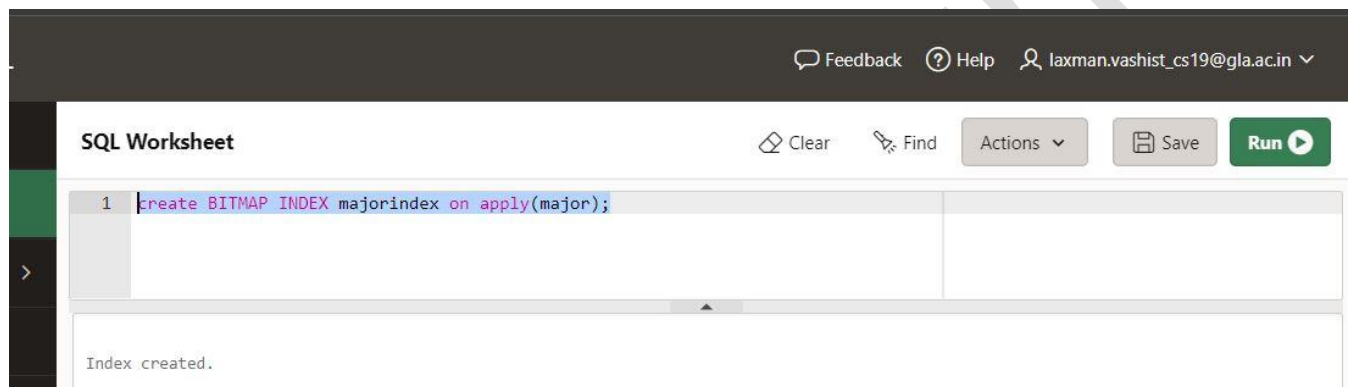
Subject Code → BCSC 0802

SubjectTeacher → MRS. Gunjan
Bharadwaj

Qus 1 ➔ As we need to notify in system birthday of each student so kindly create an index DoBIndex on column DoB of Student table.

CODE ➔

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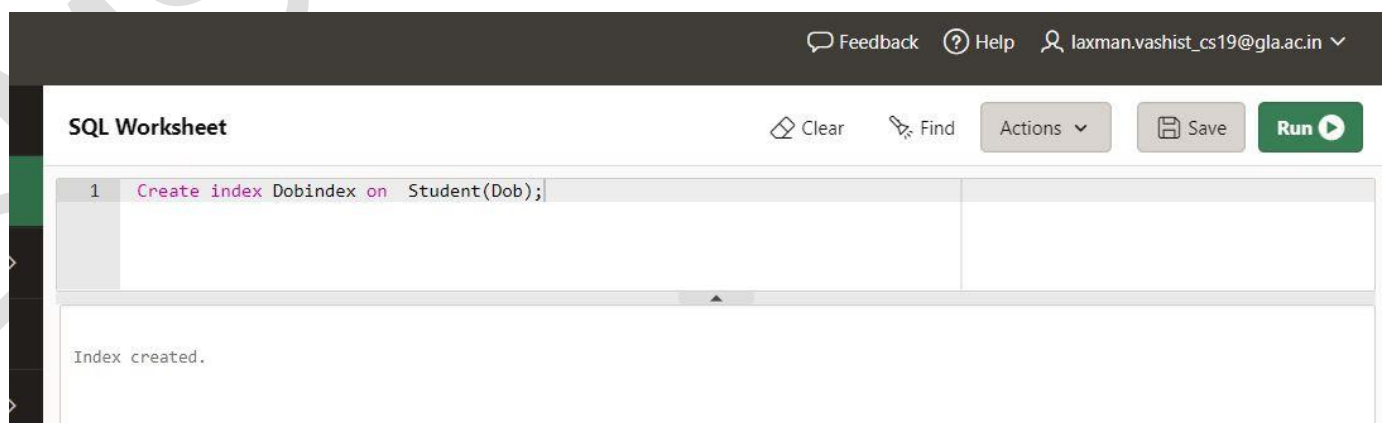


The screenshot shows an SQL Worksheet interface. At the top, there are links for Feedback, Help, and a user profile for laxman.vashist_cs19@gla.ac.in. Below the header, the worksheet title is "SQL Worksheet". On the right side of the header, there are buttons for Clear, Find, Actions, Save, and a Run button. The main area contains a single line of SQL code: `1 create BITMAP INDEX majorindex on apply(major);`. Below the code editor, a message states "Index created."

Qus 2 ➔ Which index be more suitable for major in Apply? Create Bitmap Index name MAJORIndex.

CODE ➔

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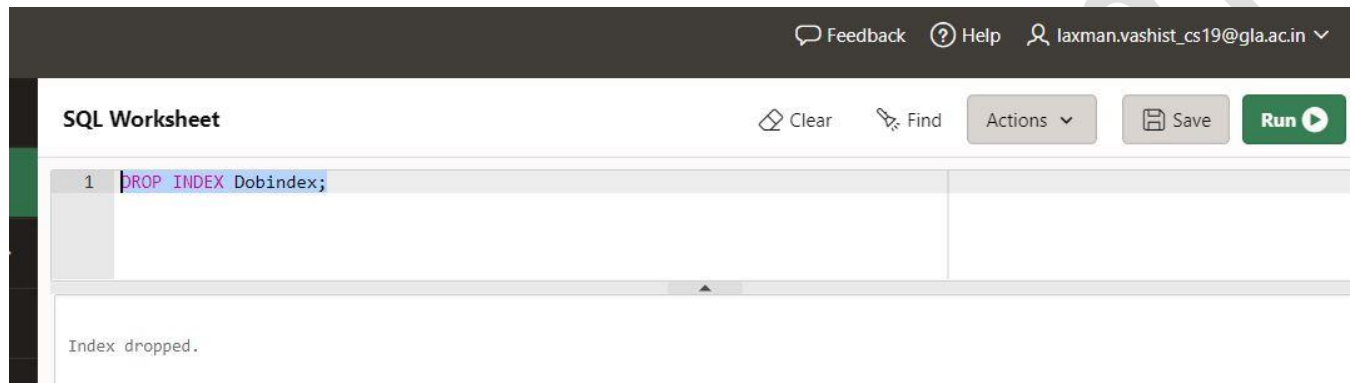


The screenshot shows an SQL Worksheet interface. At the top, there are links for Feedback, Help, and a user profile for laxman.vashist_cs19@gla.ac.in. Below the header, the worksheet title is "SQL Worksheet". On the right side of the header, there are buttons for Clear, Find, Actions, Save, and a Run button. The main area contains a single line of SQL code: `1 Create index Dobindex on Student(Dob);`. Below the code editor, a message states "Index created."

Qus 3 ➔ Remove index on DoB column.

CODE ➔

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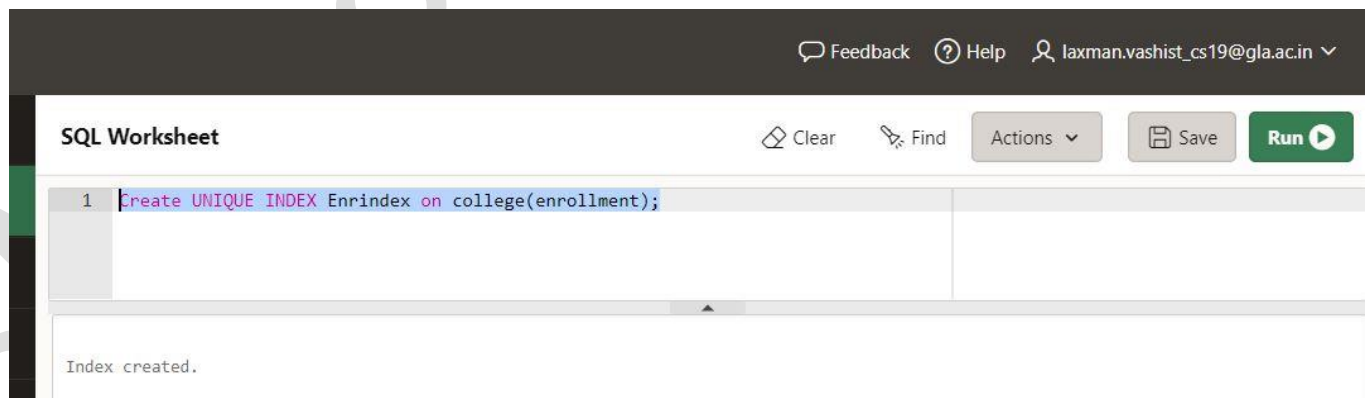


The screenshot shows a web-based SQL Worksheet interface. At the top, there is a navigation bar with links for Feedback, Help, and a user profile for laxman.vashist_cs19@gla.ac.in. Below this, the main area is titled "SQL Worksheet" and contains a toolbar with buttons for Clear, Find, Actions, Save, and a Run button. The SQL editor shows a single line of code: `DROP INDEX Dobindex;`. Below the editor, a message box displays the output: "Index dropped."

Qus 4 ➔ Create an Unique index ENRindex on enrollment.

CODE ➔

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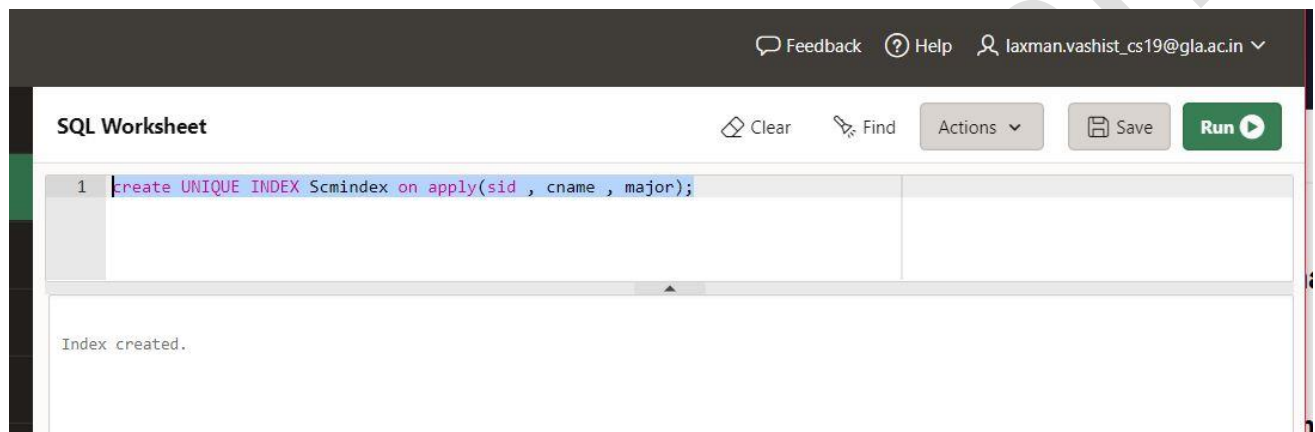


The screenshot shows the same SQL Worksheet interface as above. The SQL editor now contains the code: `Create UNIQUE INDEX Enrindex on college(enrollment);`. The output message below the editor reads: "Index created."

Qus 5 ➔ Create an composite Unique index SCMindex on Apply using columns sid, cName, major.

CODE ➔

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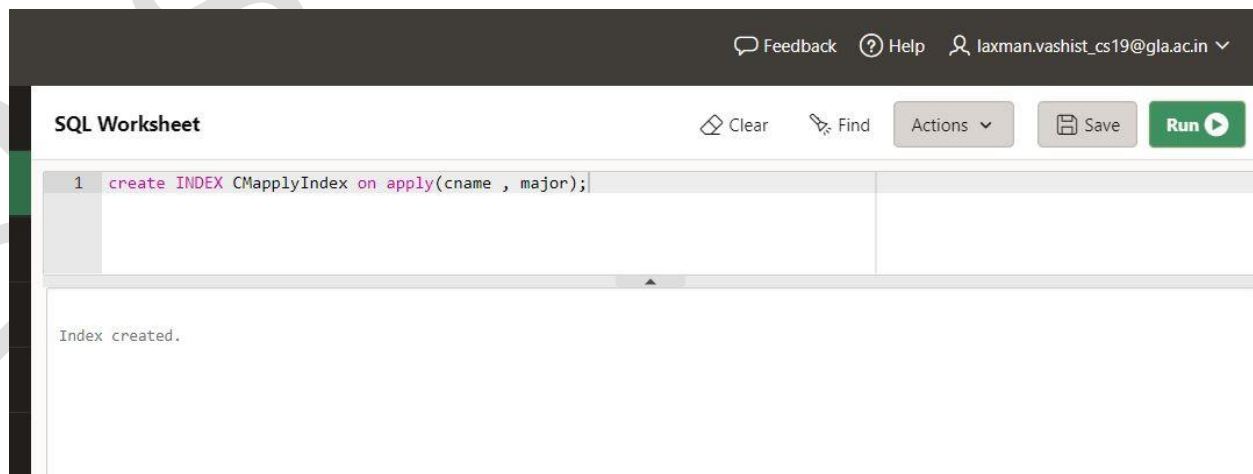


The screenshot shows a web-based SQL editor interface. At the top, there is a header bar with 'Feedback', 'Help', and a user profile 'laxman.vashist_cs19@gla.ac.in'. Below this is a toolbar with 'Clear', 'Find', 'Actions', 'Save', and a 'Run' button. The main area is titled 'SQL Worksheet' and contains a single line of SQL code: `1 create UNIQUE INDEX Scmindex on apply(sid , cname , major);`. Below the code editor, a message box displays 'Index created.'

Qus 6 ➔ Create composite index on Apply using columns cName and major. Name this index as CMapplyINDX.

CODE ➔

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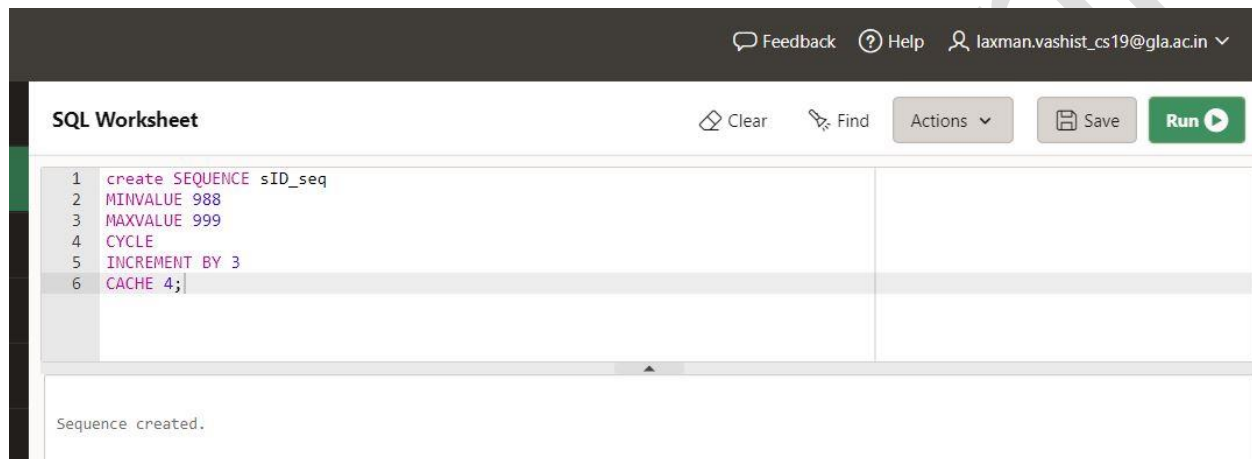


The screenshot shows a web-based SQL editor interface, similar to the one above. The header bar and toolbar are identical. The 'SQL Worksheet' section contains the SQL code: `1 create INDEX CMapplyIndex on apply(cname , major);`. Below the code editor, a message box displays 'Index created.'

Qus 7 ➔ Create sequence sID_seq with following parameters, increment by 3, cycle, cache 4 and which will generate the numbers among 988 to 999.

CODE ➔

=====



The screenshot shows a web-based SQL Worksheet interface. At the top, there's a header with 'Feedback', 'Help', and a user profile 'laxman.vashist_cs19@gla.ac.in'. Below the header, the 'SQL Worksheet' section contains a code editor with the following SQL code:

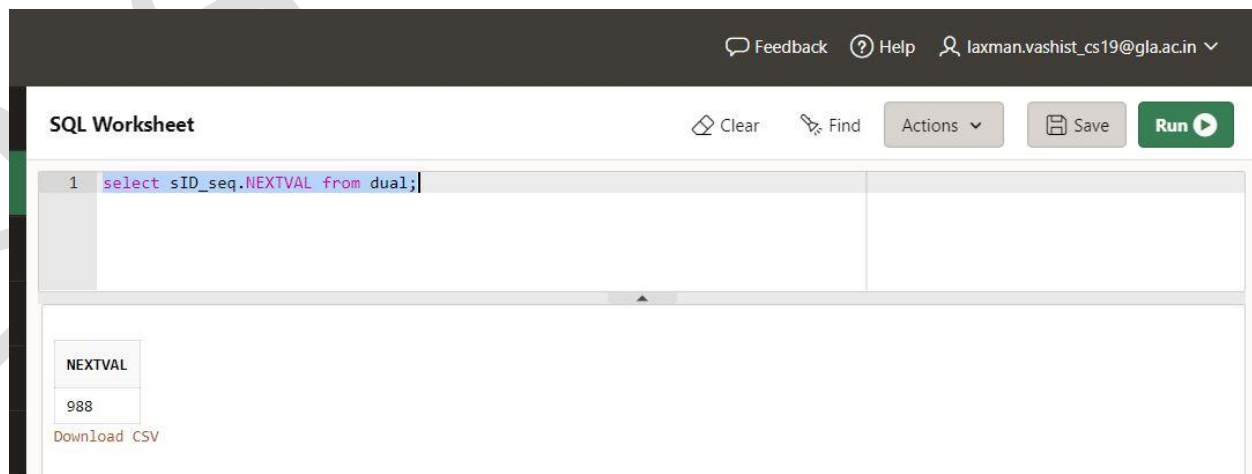
```
1 create SEQUENCE sID_seq
2 MINVALUE 988
3 MAXVALUE 999
4 CYCLE
5 INCREMENT BY 3
6 CACHE 4;
```

Below the code editor, a message states 'Sequence created.' The interface also includes buttons for 'Clear', 'Find', 'Actions', 'Save', and a 'Run' button with a play icon.

Qus 8 ➔ Display next value of Sequence sID_seq.

CODE ➔

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The screenshot shows the same SQL Worksheet interface. The code editor now contains the following SQL query:

```
1 select sID_seq.NEXTVAL from dual;
```

Below the code editor, the result is displayed in a table with one row and one column:

NEXTVAL
988

Below the table, there is a 'Download CSV' link. The interface also includes buttons for 'Clear', 'Find', 'Actions', 'Save', and a 'Run' button with a play icon.

Qus 9 → A new student entered the database named Eric with next sID from sequence sID_seq having GPA 9.9 , sizeHS 9999, DoB as '23-Apr-98' to table Student.

CODE →

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Feedback ? Help laxman.vashist_cs19@glia.ac.in

SQL Worksheet Clear Find Actions Save Run

```
1 Insert into Student (sID, sname, GPA, sizeHS, Dob)
2 values(sID_seq.NEXTVAL, 'ERIC',9.9,9999,'23-Apr-98');
3 select * from Student;
```

1 row(s) inserted.

SID	SNAME	GPA	SIZEHS	DOB
991	ERIC	9.9	9999	23-APR-98
123	Amy	3.9	1000	26-JUN-96
234	Bob	3.6	1500	07-APR-95
345	Craig	3.5	500	04-FEB-95
456	Doris	3.9	1000	24-JUL-97
567	Edward	2.9	2000	21-DEC-96
678	Fay	3.8	200	27-AUG-96
789	Gary	3.4	800	08-OCT-96
987	Helen	3.7	800	27-MAR-97
876	Irene	3.9	400	07-MAR-96
765	Jay	2.9	1500	08-AUG-98
654	Amy	3.9	1000	26-MAY-96
543	Craig	3.4	2000	27-AUG-05

Qus 10 → Now, another boy registered to our system named Troy with next sID from sequence sID_seq having GPA 9.8 and sizeHS 989 and Dob as '25-Nov-99'.

CODE →

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Feedback Help laxman.vashist_cs19@gla.ac.in

SQL Worksheet Clear Find Actions Save Run

```
1 Insert into Student (sID, sName, GPA, sizeHS, Dob)
2 values(sID_seq.NEXTval,'Troy',9.8,989,'25-Nov-99');
3 select * from Student;
```

SID	SNAME	GPA	SIZEHS	DOB
991	ERIC	9.9	9999	23-APR-98
123	Amy	3.9	1000	26-JUN-96
234	Bob	3.6	1500	07-APR-95
345	Craig	3.5	500	04-FEB-95
456	Doris	3.9	1000	24-JUL-97
567	Edward	2.9	2000	21-DEC-96
678	Fay	3.8	200	27-AUG-96
789	Gary	3.4	800	08-OCT-96
987	Helen	3.7	800	27-MAR-97
876	Irene	3.9	400	07-MAR-96
765	Jay	2.9	1500	08-AUG-98
654	Amy	3.9	1000	26-MAY-96
543	Craig	3.4	2000	27-AUG-05
994	Troy	9.8	989	25-NOV-99

Download CSV

Qus 11 → Display details of Student table and observe newly inserted Eric and Troy sID.

CODE →

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Feedback ? Help laxman.vashist_cs19@gla.ac.in

SQL Worksheet Clear Find Actions Save Run

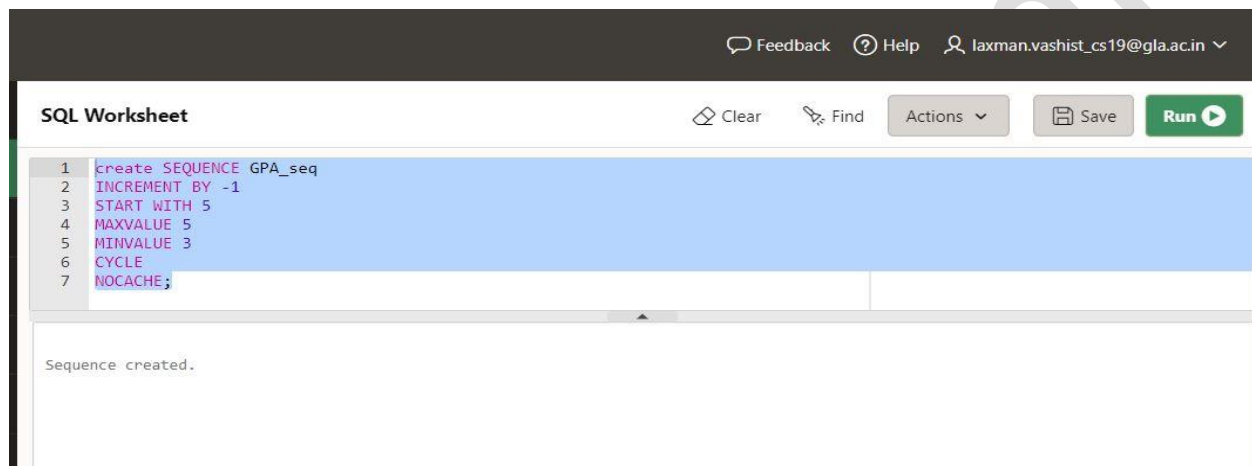
```
1 select * from Student;
```

SID	SNAME	GPA	SIZEHS	DOB
991	ERIC	9.9	9999	23-APR-98
123	Amy	3.9	1000	26-JUN-96
234	Bob	3.6	1500	07-APR-95
345	Craig	3.5	500	04-FEB-95
456	Doris	3.9	1000	24-JUL-97
567	Edward	2.9	2000	21-DEC-96
678	Fay	3.8	200	27-AUG-96
789	Gary	3.4	800	08-OCT-96
987	Helen	3.7	800	27-MAR-97
876	Irene	3.9	400	07-MAR-96
765	Jay	2.9	1500	08-AUG-98

Qus 12 → Create sequence GPA_seq having maximum value as 5 and min value as 3 you are supposed to start sequence with 5 and decrement the sequence with -1, cycle and no cache.

CODE →

=====



The screenshot shows an SQL Worksheet interface with a dark header bar containing 'Feedback', 'Help', and a user profile 'laxman.vashist_cs19@gla.ac.in'. Below the header, the title 'SQL Worksheet' is followed by buttons for 'Clear', 'Find', 'Actions', 'Save', and a green 'Run' button. The main text area contains the following SQL code:

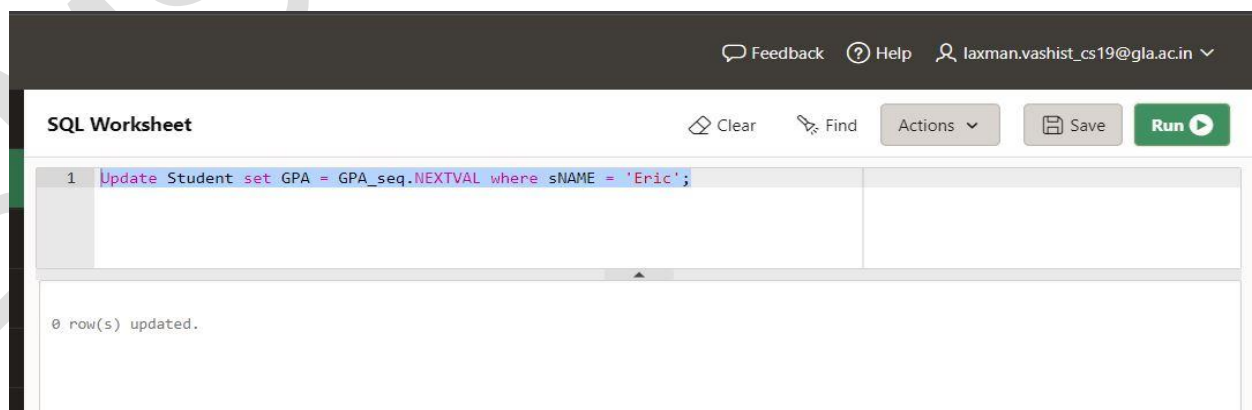
```
1 create SEQUENCE GPA_seq
2 INCREMENT BY -1
3 START WITH 5
4 MAXVALUE 5
5 MINVALUE 3
6 CYCLE
7 NOCACHE;
```

Below the code, a status message reads 'Sequence created.'

Qus 13 → Update GPA of Eric to next value of sequence GPA_seq.

CODE →

=====



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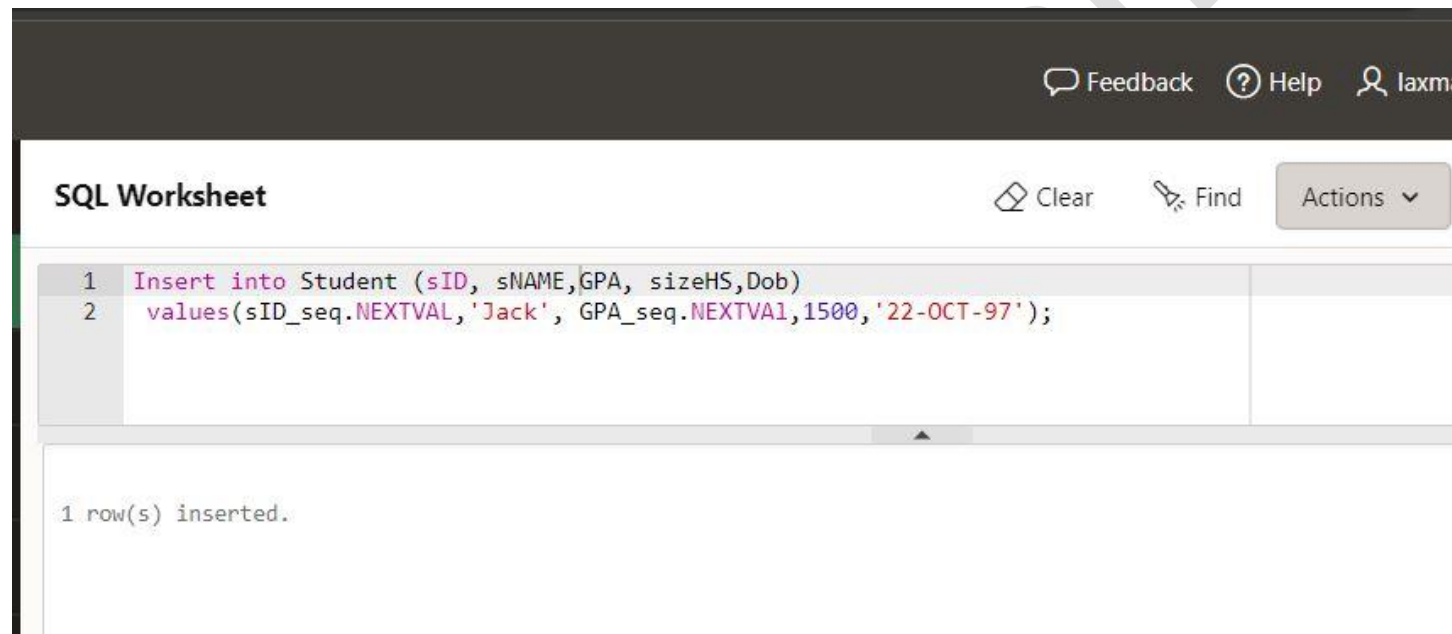
```
1 Update Student set GPA = GPA_seq.NEXTVAL where sNAME = 'Eric';
```

Below the code, a status message reads '0 row(s) updated.'

Qus 14 ➔ Insert student Jack with sId from sID_seq , GPA from GPA_seq, sizeHS as 1500 and DoB as '22- OCT-97'.

CODE ➔

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The screenshot shows an SQL Worksheet interface. At the top right, there are links for 'Feedback', 'Help', and a user profile 'laxm'. The main title is 'SQL Worksheet'. Below the title, there are buttons for 'Clear', 'Find', and 'Actions'. The SQL code is entered in a text area:

```
1 Insert into Student (sID, sNAME,GPA, sizeHS,Dob)
2 values(sID_seq.NEXTVAL,'Jack', GPA_seq.NEXTVAL,1500,'22-OCT-97');
```

Below the code area, the result is displayed: '1 row(s) inserted.'

Qus 15 ➔ Display detail of Student Table and observe GPA and sID of Jack.

CODE ➔

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Feedback ? Help laxman.vashist_cs19@gla.ac.in

SQL Worksheet Clear Find Actions Save Run

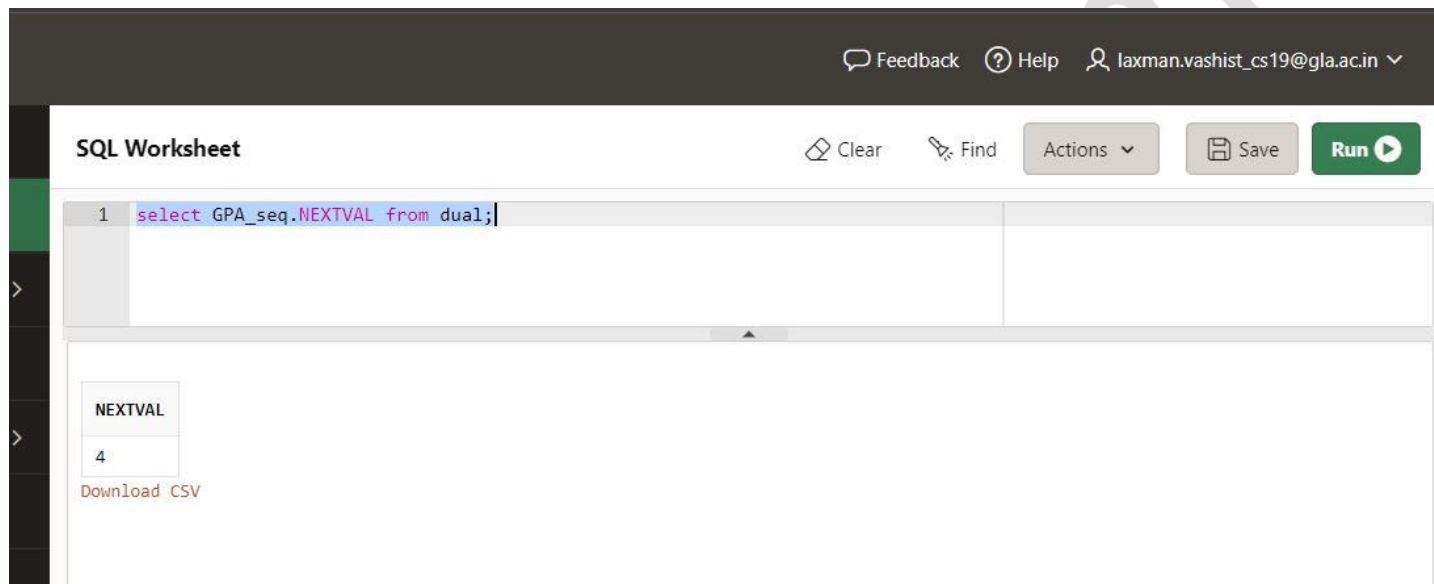
```
1 select * from Student;
```

SID	SNAME	GPA	SIZEHS	DOB
991	ERIC	9.9	9999	23-APR-98
123	Amy	3.9	1000	26-JUN-96
234	Bob	3.6	1500	07-APR-95
345	Craig	3.5	500	04-FEB-95
456	Doris	3.9	1000	24-JUL-97
567	Edward	2.9	2000	21-DEC-96
678	Fay	3.8	200	27-AUG-96
789	Gary	3.4	800	08-OCT-96
987	Helen	3.7	800	27-MAR-97
876	Irene	3.9	400	07-MAR-96
765	Jay	2.9	1500	08-AUG-98
654	Amy	3.9	1000	26-MAY-96
543	Craig	3.4	2000	27-AUG-05
997	Jack	5	1500	22-OCT-97
994	Troy	9.8	989	25-NOV-99

Qus 16 ➔ Display next value of sequence GPA_seq.

CODE ➔

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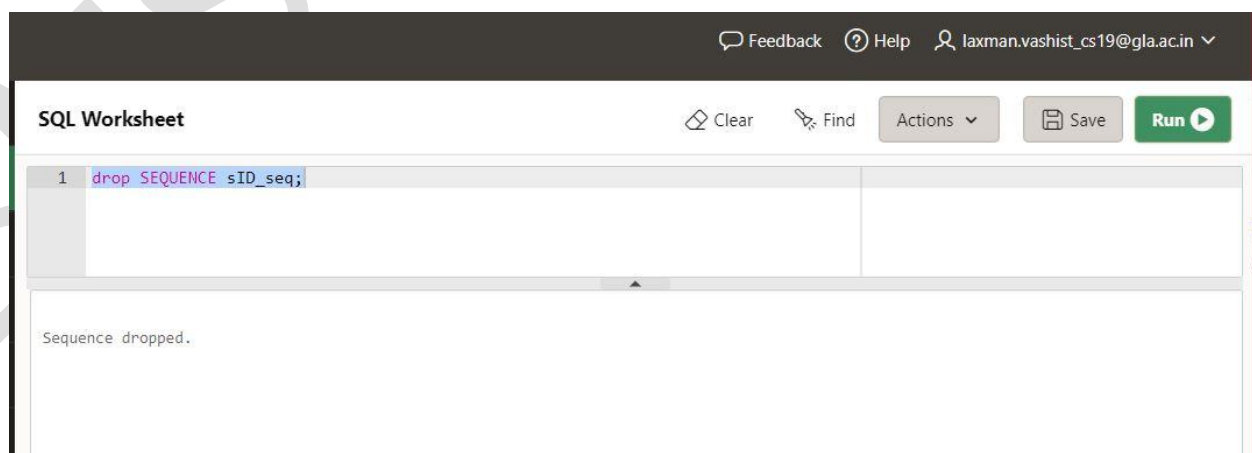


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Qus 17 ➔ Drop sequence sID_seq.

CODE ➔

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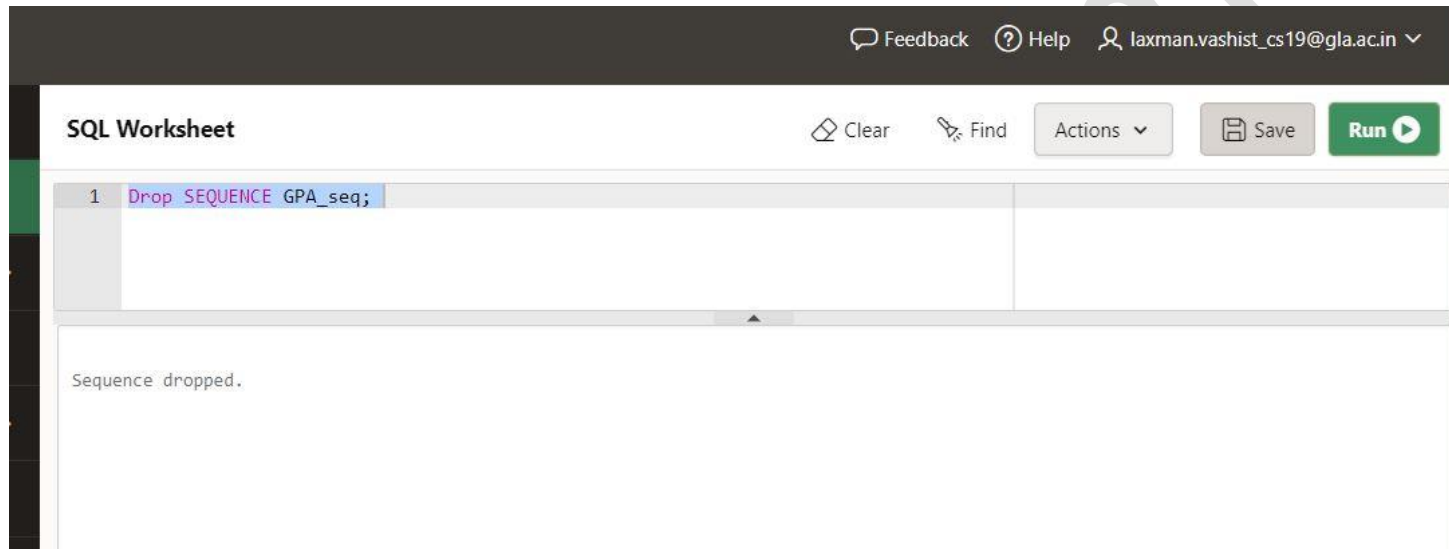


The screenshot shows the same SQL Worksheet interface. The code editor now contains the query: `1 drop SEQUENCE sID_seq;`. The execution result is displayed as a single line of text: "Sequence dropped."

Qus 18 ➔ Drop sequence GPA_seq.

CODE ➔

=====



The screenshot shows an SQL Worksheet interface. At the top, there is a dark header bar with links for 'Feedback', 'Help', and a user profile 'laxman.vashist_cs19@gla.ac.in'. Below the header, the title 'SQL Worksheet' is displayed. To the right of the title are buttons for 'Clear', 'Find', 'Actions' (with a dropdown arrow), 'Save', and a green 'Run' button with a play icon. The main area of the worksheet contains a single line of SQL code: 'Drop SEQUENCE GPA_seq;'. Below the code editor, the output of the query is displayed: 'Sequence dropped.'

THANK YOU

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