



SUBMITTED BY

Lalit prajapati

SUBMITTED TO

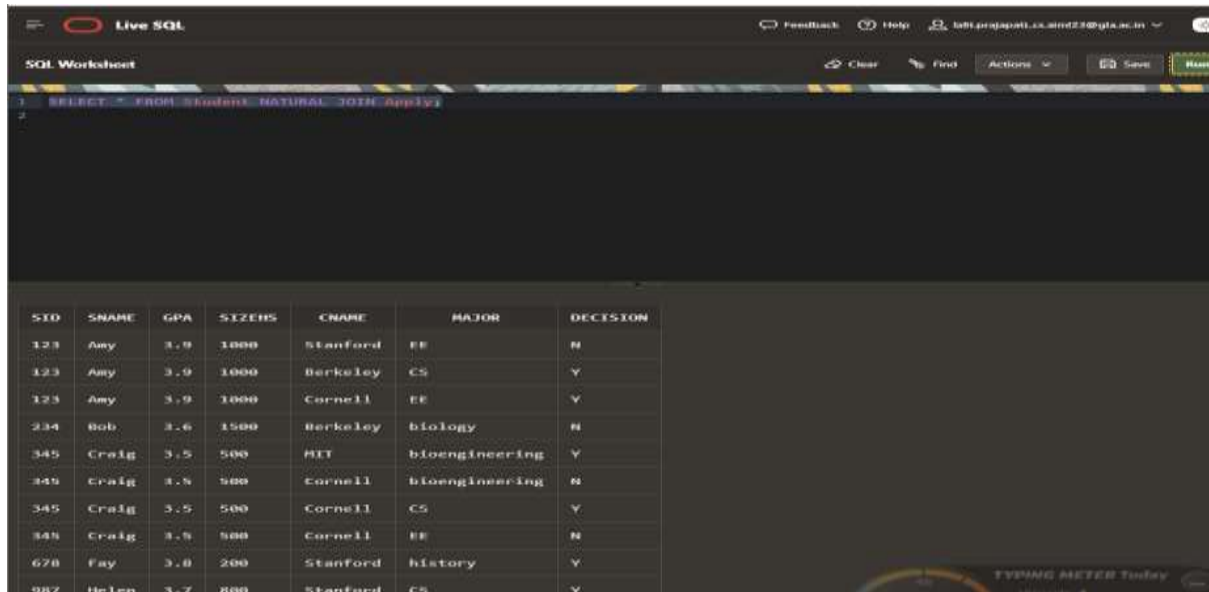
Dr. Surendra Kumar

SUBMITTED ON

21st February 2024

Write SQL Queries

Q1: Produce a combine table in which each student is combine with every other application.



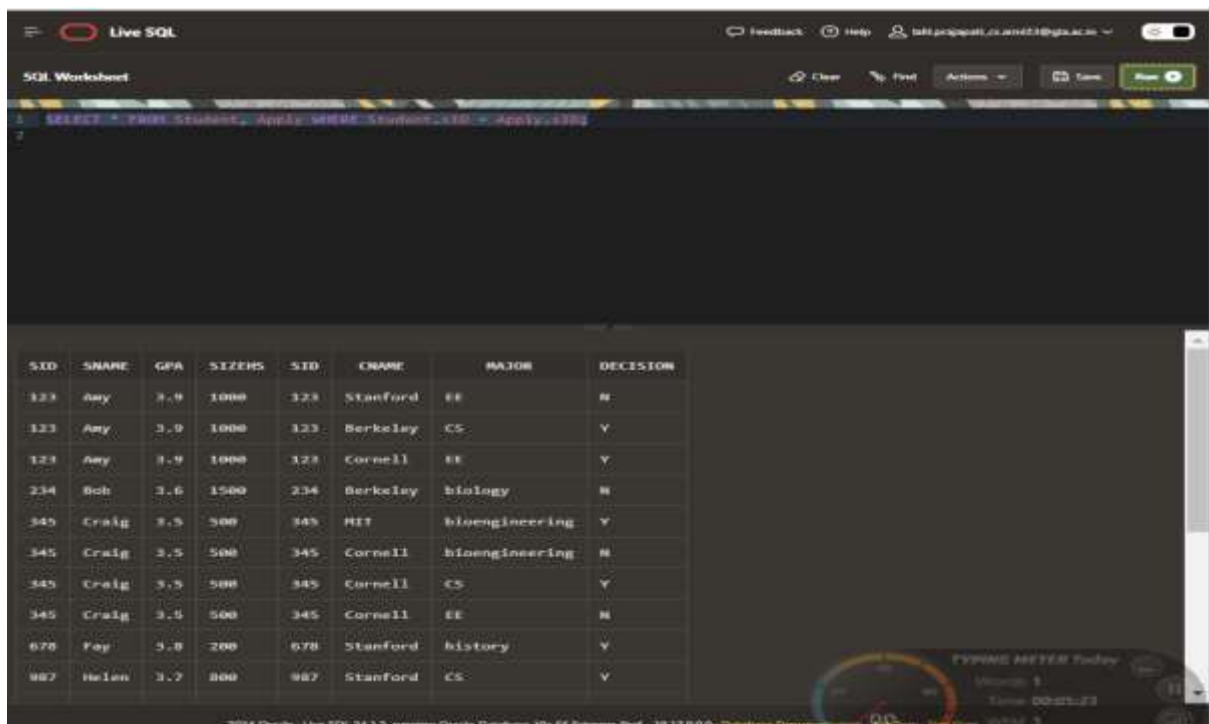
The screenshot shows the Live SQL interface with the following SQL query:

```
1 SELECT * FROM Student NATURAL JOIN Apply;
```

The results table is as follows:

SID	SNAME	GPA	SIZES	CNAME	MAJOR	DECISION
123	Amy	3.9	1000	Stanford	EE	N
123	Amy	3.9	1000	Berkeley	CS	Y
123	Amy	3.9	1000	Cornell	EE	Y
234	Bob	3.6	1500	Berkeley	biology	N
345	Craig	3.5	500	MIT	bioengineering	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
678	Fay	3.8	200	Stanford	history	Y
987	Helen	3.7	800	Stanford	CS	Y

Q2: Give Student ID, name, GPA and name of college and major each student applied to.



The screenshot shows the Live SQL interface with the following SQL query:

```
1 SELECT * FROM Student, Apply WHERE Student.SID = Apply.SID;
```

The results table is as follows:

SID	SNAME	GPA	SIZES	SID	CNAME	MAJOR	DECISION
123	Amy	3.9	1000	123	Stanford	EE	N
123	Amy	3.9	1000	123	Berkeley	CS	Y
123	Amy	3.9	1000	123	Cornell	EE	Y
234	Bob	3.6	1500	234	Berkeley	biology	N
345	Craig	3.5	500	345	MIT	bioengineering	Y
345	Craig	3.5	500	345	Cornell	bioengineering	N
345	Craig	3.5	500	345	Cornell	CS	Y
345	Craig	3.5	500	345	Cornell	EE	N
678	Fay	3.8	200	678	Stanford	history	Y
987	Helen	3.7	800	987	Stanford	CS	Y

Q3. Find detail of applications who applied to California State.

Live SQL

SQL Worksheet

```
1 SELECT * FROM Apply, College WHERE state = 'CA';
```

SID	CNAME	MAJOR	DECISION	COLLEGEName	STATE	ENROLLMENT
123	Stanford	EE	N	Stanford	CA	15000
123	Berkeley	CS	Y	Stanford	CA	15000
123	Cornell	EE	Y	Stanford	CA	15000
234	Berkeley	Biology	N	Stanford	CA	15000
345	MIT	Bioengineering	Y	Stanford	CA	15000
345	Cornell	Bioengineering	N	Stanford	CA	15000
345	Cornell	CS	Y	Stanford	CA	15000
345	Cornell	EE	N	Stanford	CA	15000
678	Stanford	History	Y	Stanford	CA	15000
987	Stanford	CS	Y	Stanford	CA	15000

Q4. IDs, name, GPA of students and name of college with GPA > 3.7 applying to Stanford

Live SQL

SQL Worksheet

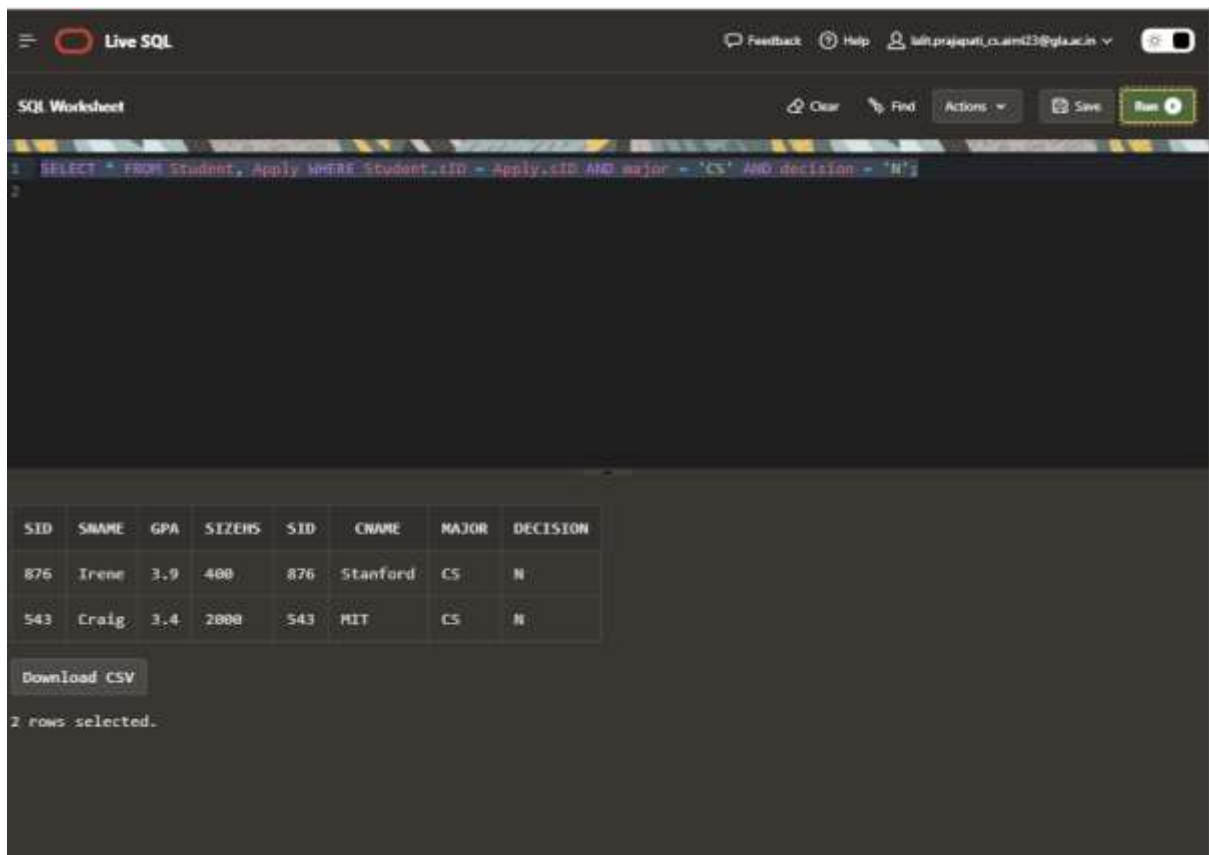
```
1 SELECT * FROM Student, Apply WHERE Student.sID = Apply.sID AND GPA > 3.7 AND cName = 'Stanford';
```

SID	SNAME	GPA	SIZEHS	SID	CNAME	MAJOR	DECISION
123	Amy	3.9	1000	123	Stanford	EE	N
678	Fay	3.8	200	678	Stanford	History	Y
876	Irene	3.9	400	876	Stanford	CS	N

Download CSV

3 rows selected.

Q5. Find detail of Student who apply to CS major and their application are rejected

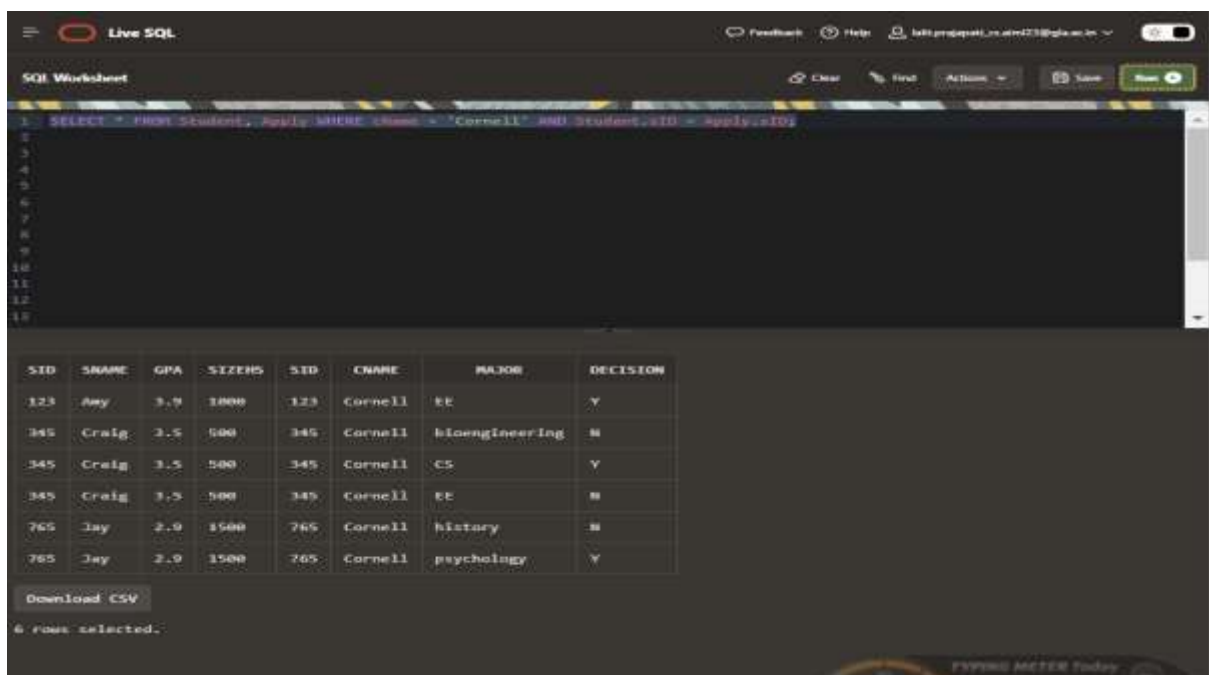


The screenshot shows the Live SQL interface with a query executed. The query is: `SELECT * FROM Student, Apply WHERE Student.sID = Apply.sID AND major = 'CS' AND decision = 'N'`. The results are displayed in a table with 8 columns: S_ID, S_NAME, GPA, SIZEHS, S_ID, CNAME, MAJOR, and DECISION. Two rows are selected, both with decision 'N'.

S_ID	S_NAME	GPA	SIZEHS	S_ID	CNAME	MAJOR	DECISION
876	Irene	3.9	400	876	Stanford	CS	N
543	Craig	3.4	2000	543	MIT	CS	N

Download CSV
2 rows selected.

Q6. Find detail of student and application who applied to colleges at New York

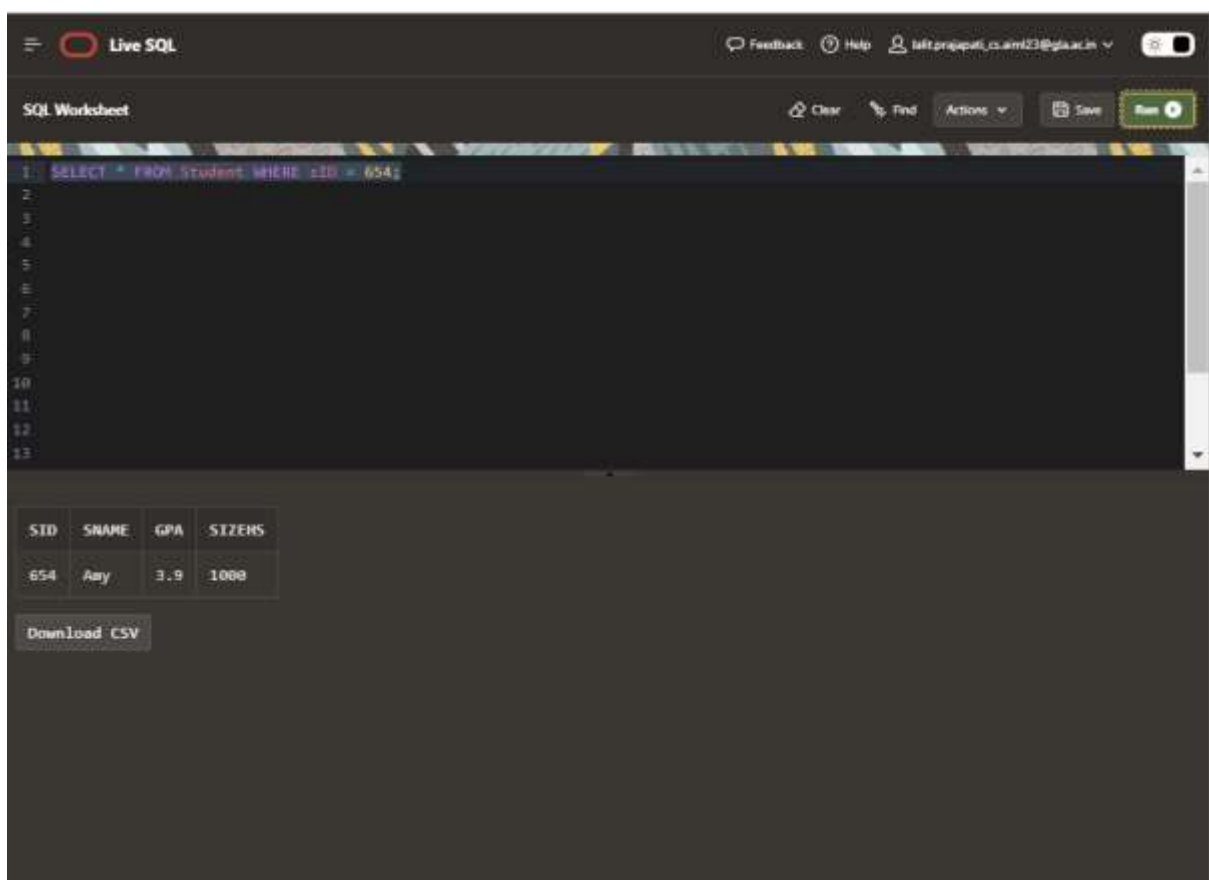


The screenshot shows the Live SQL interface with a query executed. The query is: `SELECT * FROM Student, Apply WHERE college = 'Cornell' AND Student.sID = Apply.sID`. The results are displayed in a table with 8 columns: S_ID, S_NAME, GPA, SIZEHS, S_ID, CNAME, MAJOR, and DECISION. Six rows are selected.

S_ID	S_NAME	GPA	SIZEHS	S_ID	CNAME	MAJOR	DECISION
123	Amy	3.9	1000	123	Cornell	EE	Y
345	Craig	3.5	500	345	Cornell	Bioengineering	N
345	Craig	3.5	500	345	Cornell	CS	Y
345	Craig	3.5	500	345	Cornell	EE	N
765	Jay	2.9	1500	765	Cornell	history	N
765	Jay	2.9	1500	765	Cornell	psychology	Y

Download CSV
6 rows selected.

Q7. Find detail of student who have not applied to any of college



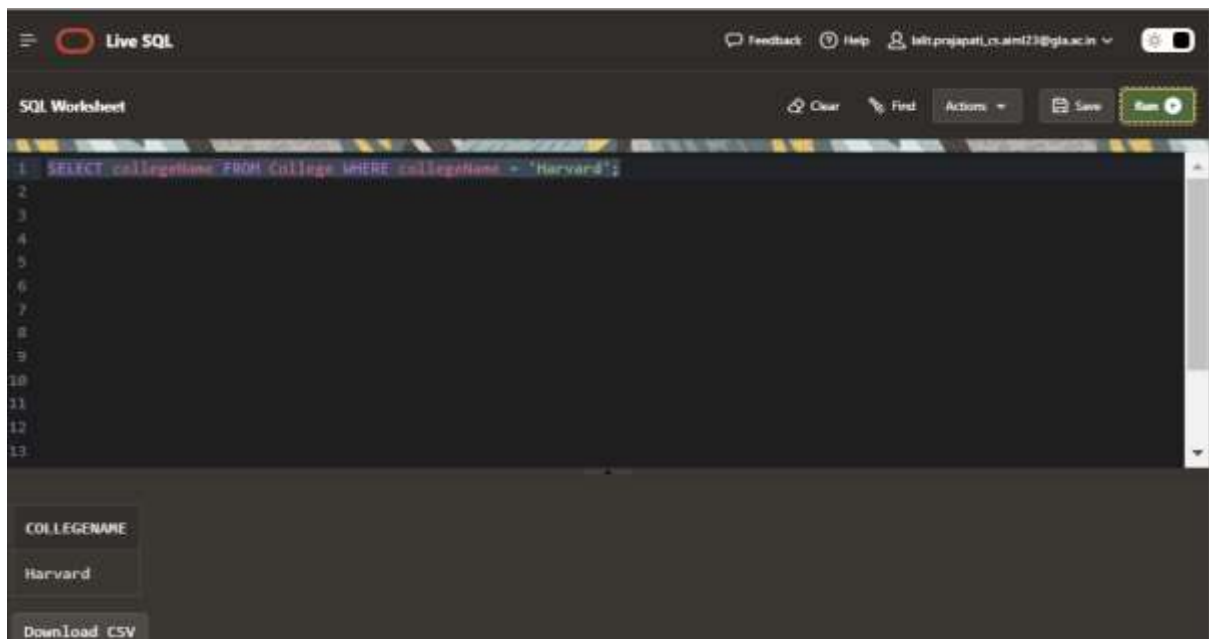
The screenshot shows a web-based SQL editor interface. At the top, there's a header with a hamburger menu, a red circle icon, and the text "Live SQL". To the right of the header are links for "Feedback", "Help", and a user profile icon with the email "talit.prajapati.cs.aim23@glia.ac.in". Below the header, there's a sub-header "SQL Worksheet" with buttons for "Clear", "Find", "Actions", "Save", and a green "Run" button with a play icon. The main area is a dark-themed code editor with line numbers 1 through 13 on the left. Line 1 contains the SQL query: `SELECT * FROM student WHERE sID = 654;`. Below the code editor, the results are displayed in a table with four columns: "SID", "SNAME", "GPA", and "SIZES". The first row of data shows the values "654", "Any", "3.9", and "1000". Below the table is a button labeled "Download CSV".

```
1: SELECT * FROM student WHERE sID = 654;
```

SID	SNAME	GPA	SIZES
654	Any	3.9	1000

Download CSV

Q8. Find college where no student have applied



Q9. Find SID who have only one application

The screenshot shows the 'Live SQL' web application. At the top, there is a navigation bar with a hamburger menu, the 'Live SQL' logo, and links for 'Feedback', 'Help', and a user profile. Below this is a toolbar with 'Clear', 'Find', 'Actions', 'Save', and 'Run' buttons. The main area is a dark-themed code editor with a line number margin on the left (1-13). The first line of code is `SELECT sID FROM Student WHERE sID = 543;`. Below the editor, a table with two columns is displayed: 'sID' and '543'. A 'Download CSV' button is located below the table. In the bottom right corner, a 'TYPING METER Today' widget shows 'Words 1' and 'Time 00:06:16'.

Q10. Find name and GPA of applicants who apply to any college whose enrollment is not more than 25000.

Live SQL

Feedback Help [tprajapati.cs@glu.ac.in](#)

SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT sname, GPA FROM student, College WHERE enrollment <= 25000;
```

SNAME	GPA
Amy	3.9
Bob	3.6
Craig	3.5
Doris	3.9
Edward	2.9
Fay	3.8
Gary	3.4
Helen	3.7
Irene	3.9
Jay	2.9

TYPING METER Today Words: 1

Q11. Find pair of students (SID) having same GPA. (each pair should occur just once in result)

Live SQL

Feedback Help [lolt.prajapati_cs.umd23@glia.ac.in](#)

SQL Worksheet

Clear Find Actions Save Run

```
1 SELECT t.sid, x.sid, x.gpa FROM student t JOIN student x ON t.gpa = x.gpa AND t.sid < x.sid;
```

SID	SID	GPA
123	456	3.9
543	789	3.4
123	876	3.9
456	876	3.9
654	876	3.9
567	765	2.9
123	654	3.9
456	654	3.9

Download CSV

8 rows selected.

TYPING METER Today

Words 1

Time 00:06:27