

Assignment3

Write queries to:

1. Display the system date

The screenshot shows a database session interface. At the top, there is a navigation bar with "My Session", "Previous Sessions", and "Previous Session". To the right of the navigation bar are buttons for "Delete", "Re-Run", and "Save". Below the navigation bar, there is a table with the following data:

| Statement | 7 | | |
|--------------|---|--------------|-----------|
| | <pre>SELECT CURRENT_DATE FROM DUAL</pre> | | |
| | <table border="1"><thead><tr><th>CURRENT_DATE</th></tr></thead><tbody><tr><td>07-FEB-22</td></tr></tbody></table> | CURRENT_DATE | 07-FEB-22 |
| CURRENT_DATE | | | |
| 07-FEB-22 | | | |

2. Display current day

3. Display current month and spell out year

4. Display spell out current date

The screenshot shows a database session interface with three statements. At the top, there is a navigation bar with "My Session", "Previous Sessions", and "Previous Session". To the right of the navigation bar are buttons for "Delete", "Re-Run", and "Save this Session". Below the navigation bar, there is a table with the following data:

| Statement | 12 | | |
|---------------------------|---|---------------------------|----------|
| | <pre>SELECT TO_CHAR(SYSDATE, 'DAY') FROM DUAL</pre> | | |
| | <table border="1"><thead><tr><th>TO_CHAR(SYSDATE, 'DAY')</th></tr></thead><tbody><tr><td>MONDAY</td></tr></tbody></table> | TO_CHAR(SYSDATE, 'DAY') | MONDAY |
| TO_CHAR(SYSDATE, 'DAY') | | | |
| MONDAY | | | |
| Statement | 13 | | |
| | <pre>SELECT TO_CHAR (SYSDATE, 'MONTH') FROM DUAL</pre> | | |
| | <table border="1"><thead><tr><th>TO_CHAR(SYSDATE, 'MONTH')</th></tr></thead><tbody><tr><td>FEBRUARY</td></tr></tbody></table> | TO_CHAR(SYSDATE, 'MONTH') | FEBRUARY |
| TO_CHAR(SYSDATE, 'MONTH') | | | |
| FEBRUARY | | | |
| Statement | 14 | | |
| | <pre>SELECT TO_CHAR (SYSDATE, 'DDSP') FROM DUAL</pre> | | |
| | <table border="1"><thead><tr><th>TO_CHAR(SYSDATE, 'DDSP')</th></tr></thead><tbody><tr><td>SEVEN</td></tr></tbody></table> | TO_CHAR(SYSDATE, 'DDSP') | SEVEN |
| TO_CHAR(SYSDATE, 'DDSP') | | | |
| SEVEN | | | |

5. Check whether it is AM or PM right now

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My Session \ Previous Sessions \ **Previous Session** [Delete](#) [Re-Run](#) [Save this Session](#)

Statement 15

>

SELECT TO_CHAR (SYSDATE, 'AM') FROM DUAL

TO_CHAR(SYSDATE, 'AM')

AM

Statement 16

>

SELECT TO_CHAR (SYSDATE, 'PM') FROM DUAL

TO_CHAR(SYSDATE, 'PM')

AM

6. Display the date of next Friday

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QL Worksheet [Clear](#) [Find](#) [Actions](#) [Save](#) [Run](#)

1 select next_day(sysdate+3,'friday') from dual;

NEXT_DAY(SYSDATE+3,'FRIDAY')

11-MAR-22

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7. Round the system date on month

8. Truncate the system date on month

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SQL Worksheet Clear Find Actions Save Run

```
1 SELECT ROUND( to_date(sysdate), 'MONTH') FROM dual;  
2 SELECT TRUNC(to_date(sysdate), 'MONTH') result FROM dual;
```

| ROUND(TO_DATE(SYSDATE), 'MONTH') |
|----------------------------------|
| 01-MAR-22 |

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| RESULT |
|-----------|
| 01-MAR-22 |

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9. Round the system date on year

10. Truncate the system date on year 11. Find the day after three days

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SQL Worksheet Clear Find Actions Save Run

```
1 SELECT ROUND( to_date(sysdate), 'yyyy') FROM dual;  
2 SELECT TRUNC(to_date(sysdate), 'yyyy') FROM dual;
```

| ROUND(TO_DATE(SYSDATE), 'YYYY') |
|---------------------------------|
| 01-JAN-22 |

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| TRUNC(TO_DATE(SYSDATE), 'YYYY') |
|---------------------------------|
| 01-JAN-22 |

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Queries Based on EMP table

12. Display day of date of joining column

13. Display those employees who join the company on Monday

SQL Worksheet

Clear Find Actions Save Run

```
1 select to_char(hiredate,'day') from employee;  
2 select * from employee where to_char(hiredate,'fmday')='monday';  
3
```

TO_CHAR(HIREDATE, 'DAY')

| |
|----------|
| monday |
| monday |
| tuesday |
| sunday |
| thursday |
| thursday |
| saturday |

Download CSV
7 rows selected.

| EMPNO | ENAME | HIREDATE | SAL |
|-------|--------------|-----------|---------|
| 4141 | vishnu | 01-NOV-21 | 162700 |
| 8262 | daler mehndi | 10-AUG-20 | 1200000 |

Download CSV
2 rows selected.

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14. Display those employees who join the company this month

15. Display those employees who join the company in last 30 days

SQL Worksheet

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Clear Find Actions Save Run

```
1 select * from employee where to_char(hiredate,'month')=to_char(sysdate,'month');  
2 select * from employee where hiredate>sysdate-30;
```

no data found

| EMPNO | ENAME | HIREDATE | SAL |
|-------|-------------|-----------|--------|
| 7723 | honey singh | 10-FEB-22 | 132000 |

Download CSV

Create a table train having three four columns

16. Train Number, date of Departure, time of departure, time of arrival

My Session

1 row(s) inserted. Actions Reset Session Save

Statement 131

```
create table train(id number (10),dod date,tod timestamp,doa date,toa timestamp)
```

Table created.

17. Insert five columns in train table

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925227-FEB-2227-FEB-22 06:30:00.000000 AM28-FEB-2228-FEB-22 11:00:00.000000 AM

My SessionCSV5 rows selected.

ActionsReset SessionSave

| | |
|---------------|--|
| Statement 136 | insert into train values(9252,'27-feb-2022','27-feb-2022 6:30:00am','28-feb-2022','28-feb-2022 11:00:00am') |
| | 1 row(s) inserted. |
| Statement 135 | insert into train values(7002,'1-march-2022','1-march-2022 2:15:00am','1-march-2022','1-march-2022 5:00:00pm') |
| | 1 row(s) inserted. |
| Statement 134 | insert into train values(3141,'27-feb-2022','27-feb-2022 1:45:00pm','27-feb-2022','27-feb-2022 9:00:00pm') |
| | 1 row(s) inserted. |
| Statement 133 | insert into train values(6001,'28-feb-2022','28-feb-2022 11:00:00am','1-march-2022','1-march-2022 1:00:00am') |
| | 1 row(s) inserted. |
| Statement 132 | insert into train values(2112,'26-feb-2022','26-feb-2022 2:00:00pm','25-feb-2022','25-feb-2022 10:00:00pm') |

18. Display all the records

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SQL WorksheetClearFindActionsSaveRun

1 select * from train;

| ID | DOD | TOD | DOA | TOA |
|------|-----------|------------------------------|-----------|------------------------------|
| 2112 | 26-FEB-22 | 26-FEB-22 02:00:00.000000 PM | 25-FEB-22 | 25-FEB-22 10:00:00.000000 PM |
| 6001 | 28-FEB-22 | 28-FEB-22 11:00:00.000000 AM | 01-MAR-22 | 01-MAR-22 01:00:00.000000 AM |
| 3141 | 27-FEB-22 | 27-FEB-22 01:45:00.000000 PM | 27-FEB-22 | 27-FEB-22 09:00:00.000000 PM |
| 7002 | 01-MAR-22 | 01-MAR-22 02:15:00.000000 AM | 01-MAR-22 | 01-MAR-22 05:00:00.000000 PM |
| 9252 | 27-FEB-22 | 27-FEB-22 06:30:00.000000 AM | 28-FEB-22 | 28-FEB-22 11:00:00.000000 AM |

Download CSV5 rows selected.

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19. Display the time values inserted in the columns
20. Display those trains which arrived on PM
21. Display train number who are going to depart in next on hour.

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SQL Worksheet Clear Find Actions Save Run

```
1 select to_char(tod,'HH:MI:SS') as TOD, to_char(toa,'HH:MI:SS') as TOA from train;
2 select * from train where to_char(toa,'pm')='pm';
3 select id from train where tod<(sysdate+0.27083) and tod>(sysdate+0.22916);
```

| TOD | TOA |
|----------|----------|
| 02:00:00 | 10:00:00 |
| 11:00:00 | 01:00:00 |
| 01:45:00 | 09:00:00 |
| 02:15:00 | 05:00:00 |
| 06:30:00 | 11:00:00 |

Download CSV
5 rows selected.

| ID | DDO | TOD | DOA | TOA |
|------|-----------|------------------------------|-----------|------------------------------|
| 2112 | 26-FEB-22 | 26-FEB-22 02.00.00.000000 PM | 25-FEB-22 | 25-FEB-22 10.00.00.000000 PM |
| 3141 | 27-FEB-22 | 27-FEB-22 01.45.00.000000 PM | 27-FEB-22 | 27-FEB-22 09.00.00.000000 PM |
| 7002 | 01-MAR-22 | 01-MAR-22 02.15.00.000000 AM | 01-MAR-22 | 01-MAR-22 05.00.00.000000 PM |

Download CSV
3 rows selected.

no data found

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Lab Assignment-4

Q1) Use the following functions ⑦

1. `chr (n) :`
2. `cconcat (char1, char2) :`
3. `instr (string, char) :`

The screenshot shows a web-based SQL execution environment. At the top, there's a navigation bar with 'My Session', 'Previous Sessions', and 'FROM DUAL'. Below this, the title 'Previous Session' is displayed. To the right of the title are three buttons: 'Delete', 'Re-Run', and 'Save this Session'. A red error message 'ORA-00936: missing expression' is visible above the first statement.

Statement 2: `SELECT CHR(69) FROM DUAL`

| CHR(69) |
|---------|
| E |

Statement 3: `select concat('dbms', 'network') from dual`

| CONCAT('DBMS', 'NETWORK') |
|---------------------------|
| dbmsnetwork |

Statement 4: `select instr('jai hind', 'hind') from dual`

| INSTR('JAIHIND', 'HIND') |
|--------------------------|
| 5 |

4. `length (n) :`
5. `lpad (char1 , n [, char2]) :`
6. `ltrim (string [, char(s)]) :`
7. `rpadd (char1 , n [, char2]) :`

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My Session \ Previous Sessions \ Previous Session Delete Re-Run Save this Session

Statement 6 ▶ select length('jai hind') from dual

| |
|-------------------|
| LENGTH('JAIHIND') |
| 8 |

Statement 7 ▶ select lpad('THAPAR', 5, '@') from dual

| |
|----------------------|
| LPAD('THAPAR',5,'@') |
| THAPA |

Statement 8 ▶ select ltrim('@@@THAPAR@@', '@') from dual

| |
|--------------------------|
| LTRIM('@@@THAPAR@@','@') |
| THAPAR@@ |

Statement 9 ▶ select rpad('THAPAR', 3, '@') from dual

| |
|----------------------|
| RPAD('THAPAR',3,'@') |
|----------------------|

8. rtrim(string [,char(s)]):

9. replace(char ,search_string , replacement_string):

10. substr(string ,position ,substring length):

11. initcap(char):

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My Session \ Previous Sessions \ Previous Session Delete Re-Run Save this Session

Statement 10 ▶ select rtrim('@@@THAPAR@@@', '@') from dual

| |
|---------------------------|
| RTRIM('@@@THAPAR@@@','@') |
| @@@THAPAR |

Statement 11 ▶ select replace('THALAR', 'L', 'P') from dual

| |
|---------------------------|
| REPLACE('THALAR','L','P') |
| THAPAR |

Statement 12 ▶ select substr('THAPAR UNIVERSITY', 2, 10) from dual

| |
|---------------------------------|
| SUBSTR('THAPARUNIVERSITY',2,10) |
| HAPAR UNIV |

Statement 13 ▶ select initcap('THAPAR UNIVERSITY') from dual

| |
|-----------------------------|
| INITCAP('THAPARUNIVERSITY') |
|-----------------------------|

12. `lower(string):`

13. `upper(string):`

14. `translate(char ,from string ,to string):`

The screenshot shows a web-based SQL execution environment. At the top, there is a navigation bar with 'My Session', 'Previous Sessions', and 'Previous Session' links. To the right are buttons for 'Delete', 'Re-Run', and 'Save this Session'. Below the navigation bar, three SQL statements are listed, each with a 'Run' button and a table of results.

| Statement | SQL Query | Result | | |
|--|--|--|--|-------------------|
| 14 | <code>select lower('THAPAR UNIVERSITY') from dual</code> | <table border="1"><thead><tr><th>LOWER('THAPARUNIVERSITY')</th></tr></thead><tbody><tr><td>thapar university</td></tr></tbody></table> | LOWER('THAPARUNIVERSITY') | thapar university |
| LOWER('THAPARUNIVERSITY') | | | | |
| thapar university | | | | |
| 15 | <code>select upper('thapar university') from dual</code> | <table border="1"><thead><tr><th>UPPER('THAPARUNIVERSITY')</th></tr></thead><tbody><tr><td>THAPAR UNIVERSITY</td></tr></tbody></table> | UPPER('THAPARUNIVERSITY') | THAPAR UNIVERSITY |
| UPPER('THAPARUNIVERSITY') | | | | |
| THAPAR UNIVERSITY | | | | |
| 16 | <code>select translate('AAAACCLLLBLEE', 'LBL', 'III') from dual</code> | <table border="1"><thead><tr><th>TRANSLATE('AAAACCLLLBLEE', 'LBL', 'III')</th></tr></thead><tbody><tr><td>AAAACIIIIIEE</td></tr></tbody></table> | TRANSLATE('AAAACCLLLBLEE', 'LBL', 'III') | AAAACIIIIIEE |
| TRANSLATE('AAAACCLLLBLEE', 'LBL', 'III') | | | | |
| AAAACIIIIIEE | | | | |

15. `abs(n):`

16. `ceil(n):`

The screenshot shows a 'SQL Worksheet' interface. At the top, there is a navigation bar with 'Feedback', 'Help', and a user profile link. Below the navigation bar, there are buttons for 'Clear', 'Find', 'Actions', 'Save', and 'Run'. The main area contains two SQL queries, each followed by a table of results.

| Query | Result | | |
|---|--|------------|----|
| <code>select abs(-33) from dual;</code> | <table border="1"><thead><tr><th>ABS(-33)</th></tr></thead><tbody><tr><td>33</td></tr></tbody></table> <p>Download CSV</p> | ABS(-33) | 33 |
| ABS(-33) | | | |
| 33 | | | |
| <code>select ceil(22.3) from dual;</code> | <table border="1"><thead><tr><th>CEIL(22.3)</th></tr></thead><tbody><tr><td>23</td></tr></tbody></table> <p>Download CSV</p> | CEIL(22.3) | 23 |
| CEIL(22.3) | | | |
| 23 | | | |

17. `cos(n)` :

18. `exp(n)` :

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SQL WorksheetClearFindActionsSaveRun

```
1 select cos(0) from dual;
2 select exp(1) from dual;
```

COS(0)
1
[Download CSV](#)

EXP(1)
2.71828182845904523536028747135266249776
[Download CSV](#)

19. `floor(n)` :

20. `mod(m ,n)` :

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SQL WorksheetClearFindActionsSaveRun

```
1 select floor(303.32) from dual;
2 select mod(10, 3) from dual;
3 select power(2, 5) from dual
```

FLOOR(303.32)
303
[Download CSV](#)

MOD(10,3)
1
[Download CSV](#)

21. `power(x ,y)` :

22. `sign(n)` :

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SQL Worksheet Clear Find Actions Save Run

```
1 select power(2, 5) from dual;
2 select sign(332) from dual;
```

| |
|------------|
| POWER(2,5) |
| 32 |

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| |
|-----------|
| SIGN(332) |
| 1 |

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23. `sqrt(n);`
24. `trunc(x ,n):`

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SQL Worksheet Clear Find Actions Save Run

```
1 select sqrt(25) from dual;
2 select trunc(25.123) from dual;
```

| |
|----------|
| SQRT(25) |
| 5 |

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| |
|---------------|
| TRUNC(25.123) |
| 25 |

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25. sysdate:

26. add_months(d ,n):

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SQL Worksheet Clear Find Actions Save Run

```
1 select sysdate from dual;
2 select add_months(sysdate, 2) from dual
```

| SYSDATE |
|-----------|
| 01-MAR-22 |

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| ADD_MONTHS(SYSDATE,2) |
|-----------------------|
| 01-MAY-22 |

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27. last_day():

28. months_between(date1 ,date2):

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SQL Worksheet Clear Find Actions Save Run

```
1 select last_day(sysdate) from dual;
2 select months_between(sysdate, sysdate+60) from dual
```

| LAST_DAY(SYSDATE) |
|-------------------|
| 31-MAR-22 |

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| MONTHS_BETWEEN(SYSDATE, SYSDATE+60) |
|---|
| -1.93548387096774193548387096774193548387 |

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29. `next_day(date ,char):`

30. `greatest(expr):`

SQL Worksheet

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Clear Find Actions Save Run

```
1 select next_day(sysdate, 'TUESDAY') from dual;  
2 select greatest(1, 2, 3, 4, 5) from dual;
```

NEXT_DAY(SYSDATE, 'TUESDAY')
08-MAR-22
Download CSV

GREATEST(1,2,3,4,5)
5
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31. `least(expr):`

SQL Worksheet

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Clear Find Actions Save Run

```
1 select least(1, 2, 3, 4, 5) from dual;
```

LEAST(1,2,3,4,5)
1
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Q2) Display current time in hour : min : sec format

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SQL Worksheet Clear Find Actions Save Run

```
1 select to_char(current_timestamp, 'HH24:MI:SS') from dual;
```

| TO_CHAR(CURRENT_TIMESTAMP, 'HH24:MI:SS') |
|--|
| 22:28:18 |

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Q3) Display salary + commission of emp table

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SQL Worksheet Clear Find Actions Save Run

```
1 select salary+commission from emp;
```

| SALARY+COMMISSION |
|-------------------|
| 225000 |
| 234000 |
| 173000 |

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3 rows selected.

Q4) Store any date value in hiredate column of table ?

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SQL Worksheet [Clear](#) [Find](#) [Actions](#) [Save](#) [Run](#)

1 `insert into emp values(102003,'yuvraj',250000,23000, date '2022-01-01')`

1 row(s) inserted.

Q5) Display name of employee(s) who join the company in 1985 ?

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SQL Worksheet [Clear](#) [Find](#) [Actions](#) [Save](#) [Run](#)

1 `select * from emp where trim(to_char(hiredate, 'YYYY')) = 1985;`

| ID | NAME | SALARY | COMMISSION | HIREDATE |
|--------|---------|--------|------------|-----------|
| 101001 | sarthak | 210000 | 24000 | 12-DEC-85 |

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Q6) Display name of the employee(s) who join the company this year ?

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SQL WorksheetClearFindActionsSaveRun

```
1 select * from emp where trim(to_char(hiredate, 'YYYY')) =
2 trim(to_char(sysdate, 'YYYY'))
```

| ID | NAME | SALARY | COMMISSION | HIREDATE |
|--------|--------|--------|------------|-----------|
| 102002 | billie | 150000 | 23000 | 01-JAN-22 |

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