

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> SELECT
  2  '1,234.00' NUM1,
  3  '2,345.00' NUM2,
  4  '1,234.00' + '2,345.00' Result
  5  FROM DUAL;
'1,234.00' + '2,345.00' Result
*
```

ERROR at line 4:
ORA-01722: invalid number

```
SQL> SELECT
  2  '1,234.00' NUM1,
  3  '2,345.00' NUM2,
  4  TO_NUMBER('1,234.00','9G999D99') + TO_NUMBER('2,345.00','9G999D99')
Result
  5  FROM DUAL;
```

NUM1	NUM2	RESULT
1,234.00	2,345.00	3579

```
SQL> ED
Wrote file afiedt.buf
```

```
  1  SELECT
  2  '1,234.00' NUM1,
  3  '2,345.00' NUM2,
  4  TO_CHAR(TO_NUMBER('1,234.00','9G999D99') +
TO_NUMBER('2,345.00','9G999D99'),'9G999D99') Result
  5* FROM DUAL
SQL> /
```

NUM1	NUM2	RESULT
1,234.00	2,345.00	3,579.00

```
SQL> SELECT
  2  '1,234.00INR' NUM1,
  3  '2,345.00INR' NUM2,
  4  TO_NUMBER('1,234.00','9G999D99L', 'NLS_CURRENCY = INR') +
  5  TO_NUMBER('2,345.00','9G999D99L', 'NLS_CURRENCY = INR') Result
  6  FROM DUAL;
TO_NUMBER('1,234.00','9G999D99L', 'NLS_CURRENCY = INR') +
*
```

ERROR at line 4:
ORA-01722: invalid number

```
SQL> ED
Wrote file afiedt.buf
```

```
  1  SELECT
  2  '1,234.00INR' NUM1,
```

Spool File For Oracle Students Prepared By Mr. Balram

```
3  '2,345.00INR' NUM2,
4  TO_NUMBER('1,234.00INR','9G999D99L', 'NLS_CURRENCY = INR') +
5  TO_NUMBER('2,345.00INR','9G999D99L', 'NLS_CURRENCY = INR') Result
6* FROM DUAL
SQL> /
```

NUM1	NUM2	RESULT
1,234.00INR	2,345.00INR	3579

```
SQL> ED
Wrote file afiedt.buf
```

```
1  SELECT
2  '1,234.00INR' NUM1,
3  '2,345.00INR' NUM2,
4  TO_CHAR(TO_NUMBER('1,234.00INR','9G999D99L', 'NLS_CURRENCY = INR') +
5  TO_NUMBER('2,345.00INR','9G999D99L', 'NLS_CURRENCY = INR'),
'9G999D99L', 'NLS_CURRENCY = INR') Result
6* FROM DUAL
SQL> /
```

NUM1	NUM2	RESULT
1,234.00INR	2,345.00INR	3,579.00INR

```
SQL> SELECT
2  '01-DEC-23' TODAY,
3  '01-DEC-23' + 3 "3DAYS"
4  FROM DUAL;
'01-DEC-23' + 3 "3DAYS"
*
ERROR at line 3:
ORA-01722: invalid number
```

```
SQL> ED
Wrote file afiedt.buf
```

```
1  SELECT
2  '01-DEC-23' TODAY,
3  TO_DATE('01-DEC-23') + 3 "3DAYS"
4* FROM DUAL
SQL> /
```

TODAY	3DAYS
01-DEC-23	04-DEC-23

```
SQL> SELECT
2  'FRIDAY, 01, DECEMBER 2023 A.D.' TODAY,
3  TO_DATE('FRIDAY, 01, DECEMBER 2023 A.D.','DAY, DD, MONTH YYYY B.C.')
+ 3 "3DAYS"
4  FROM DUAL;
```

Spool File For Oracle Students Prepared By Mr. Balram

TODAY	3DAYS
FRIDAY, 01, DECEMBER 2023 A.D.	04-DEC-23

```
SQL> CREATE TABLE SAMPTAB
2  (
3  SAMPID NUMBER(6),
4  SAMPDATE DATE
5  );
```

```
CREATE TABLE SAMPTAB
          *
```

```
ERROR at line 1:
ORA-00955: name is already used by an existing object
```

```
SQL> DROP TABLE SAMPTAB PURGE;
```

Table dropped.

```
SQL> CREATE TABLE SAMPTAB
2  (
3  SAMPID NUMBER(6),
4  SAMPDATE DATE
5  );
```

Table created.

```
SQL> SELECT * FROM SAMPTAB;
```

```
no rows selected
```

```
SQL> INSERT INTO SAMPTAB
      2  VALUES ('100000',SYSDATE);
```

```
1 row created.
```

```
SQL> ED
Wrote file afiedt.buf
```

```

1  INSERT INTO SAMPTAB
2*  VALUES ('100$000',SYSDATE)
SQL> /
VALUES ('100$000',SYSDATE)
*
```

ERROR at line 2:
ORA-01722: invalid number

```
SQL> INSERT INTO SAMPTAB
      2 VALUES ('100001.25',SYSDATE);
```

```
1 row created.
```

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> INSERT INTO SAMPTAB
  2  VALUES ('-100002',SYSDATE);
```

1 row created.

```
SQL> INSERT INTO SAMPTAB
  2  VALUES ('1,00,003',SYSDATE);
VALUES ('1,00,003',SYSDATE)
      *
```

ERROR at line 2:
ORA-01722: invalid number

```
SQL> ED
Wrote file afiedt.buf
```

```
  1  INSERT INTO SAMPTAB
  2*  VALUES (TO_NUMBER('1,00,003','9G99G999'),SYSDATE)
SQL> /
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23

```
SQL> INSERT INTO SAMPTAB
  2  VALUES ('1,00,004-',SYSDATE);
VALUES ('1,00,004-',SYSDATE)
      *
```

ERROR at line 2:
ORA-01722: invalid number

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (TO_NUMBER('1,00,004-', '9G99G999MI'),SYSDATE);
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> INSERT INTO SAMPTAB
  2  VALUES ('1,00,005INR',SYSDATE);
VALUES ('1,00,005INR',SYSDATE)
      *
```

```
ERROR at line 2:
ORA-01722: invalid number
```

```
SQL> ED
Wrote file afiedt.buf
```

```
  1  INSERT INTO SAMPTAB
  2* VALUES (TO_NUMBER('1,00,005INR','9G99G999L', 'NLS_CURRENCY =
INR'),SYSDATE)
SQL> /
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23
100005	01-DEC-23

6 rows selected.

```
SQL> SELECT
  2  TO_CHAR(100006, 'XXXXXXXXXX') HEXA
  3  FROM DUAL;
```

HEXA
186A6

```
SQL> INSERT INTO SAMPTAB
  2  VALUES ('186A6',SYSDATE);
VALUES ('186A6',SYSDATE)
      *
```

```
ERROR at line 2:
ORA-01722: invalid number
```

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (TO_NUMBER('186A6','XXXXXXXX'),SYSDATE);
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

Spool File For Oracle Students Prepared By Mr. Balram

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23
100005	01-DEC-23
100006	01-DEC-23

7 rows selected.

```
SQL> INSERT INTO SAMPTAB
      2  VALUES (100007, '01-DEC-23');
```

1 row created.

```
SQL> INSERT INTO SAMPTAB
      2  VALUES (100008, '01-DECEMBER-23');
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23
100005	01-DEC-23
100006	01-DEC-23
100007	01-DEC-23
100008	01-DEC-23

9 rows selected.

```
SQL> INSERT INTO SAMPTAB
      2  VALUES (100009, 'FRIDAY, 01-DECEMBER-23');
VALUES (100009, 'FRIDAY, 01-DECEMBER-23')
      *
```

ERROR at line 2:

ORA-01858: a non-numeric character was found where a numeric was expected

```
SQL> ED
Wrote file afiedt.buf
```

```
      1  INSERT INTO SAMPTAB
      2* VALUES (100009, TO_DATE('FRIDAY, 01-DECEMBER-23', 'DAY, DD-MONTH-YY'))
SQL> /
```

1 row created.

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23
100005	01-DEC-23
100006	01-DEC-23
100007	01-DEC-23
100008	01-DEC-23
100009	01-DEC-23

10 rows selected.

```
SQL> SELECT * FROM SAMPTAB
2 WHERE SAMPDATE=SYSDATE;
```

no rows selected

```
SQL> SELECT * FROM SAMPTAB
2 WHERE SAMPDATE=TO_CHAR(SYSDATE, 'DD-MON-YY');
```

SAMPID	SAMPDATE
100007	01-DEC-23
100008	01-DEC-23
100009	01-DEC-23

```
SQL> SELECT SAMPID, TO_CHAR(SAMPDATE, 'DD-MON-YY, HH:MI:SS, A.M.') FROM
SAMPTAB
2 /
```

SAMPID	TO_CHAR(SAMPDATE, 'DD-MON-
100000	01-DEC-23, 12:29:03, P.M.
100001	01-DEC-23, 12:32:09, P.M.
-100002	01-DEC-23, 12:32:24, P.M.
100003	01-DEC-23, 12:36:07, P.M.
-100004	01-DEC-23, 12:38:37, P.M.
100005	01-DEC-23, 12:40:16, P.M.
100006	01-DEC-23, 12:42:04, P.M.
100007	01-DEC-23, 12:00:00, A.M.
100008	01-DEC-23, 12:00:00, A.M.
100009	01-DEC-23, 12:00:00, A.M.

10 rows selected.

```
SQL> SELECT SAMPID, TO_CHAR(SAMPDATE, 'DD-MON-YY, HH:MI:SS, A.M.')
SAMPDATE
2 WHERE TO_CHAR(SAMPDATE, 'DD-MON-YY') =TO_CHAR(SYSDATE, 'DD-MON-YY');
```

Spool File For Oracle Students Prepared By Mr. Balram

```
WHERE TO_CHAR(SAMPDATE, 'DD-MON-YY') =TO_CHAR(SYSDATE, 'DD-MON-YY')
*
```

ERROR at line 2:

ORA-00923: FROM keyword not found where expected

```
SQL> SELECT SAMPID, TO_CHAR(SAMPDATE, 'DD-MON-YY, HH:MI:SS, A.M.')
SAMPDATE
2 FROM SAMPTAB
3 WHERE TO_CHAR(SAMPDATE, 'DD-MON-YY') =TO_CHAR(SYSDATE, 'DD-MON-YY');
```

SAMPID	SAMPDATE
100000	01-DEC-23, 12:29:03, P.M.
100001	01-DEC-23, 12:32:09, P.M.
-100002	01-DEC-23, 12:32:24, P.M.
100003	01-DEC-23, 12:36:07, P.M.
-100004	01-DEC-23, 12:38:37, P.M.
100005	01-DEC-23, 12:40:16, P.M.
100006	01-DEC-23, 12:42:04, P.M.
100007	01-DEC-23, 12:00:00, A.M.
100008	01-DEC-23, 12:00:00, A.M.
100009	01-DEC-23, 12:00:00, A.M.

10 rows selected.

```
SQL> INSERT INTO SAMPTAB
2 VALUES(100010, '01-DEC-23, 07:45:20');
VALUES(100010, '01-DEC-23, 07:45:20')
*
```

ERROR at line 2:

ORA-01830: date format picture ends before converting entire input string

```
SQL> INSERT INTO SAMPTAB
2 VALUES(100010, TO_DATE('01-DEC-23, 07:45:20', 'DD-MON-YY, HH:MI:SS'));
```

1 row created.

```
SQL> SELECT * FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	01-DEC-23
100001	01-DEC-23
-100002	01-DEC-23
100003	01-DEC-23
-100004	01-DEC-23
100005	01-DEC-23
100006	01-DEC-23
100007	01-DEC-23
100008	01-DEC-23
100009	01-DEC-23
100010	01-DEC-23

Spool File For Oracle Students Prepared By Mr. Balram

11 rows selected.

```
SQL> TRUNCATE TABLE SAMPTAB;
```

Table truncated.

```
SQL> --INSERTING B.C. Dates--
```

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100000,'02-DEC-23');
```

1 row created.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YYYY B.C.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-2023 A.D.

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100001,'02-DEC-23, B.C.');
```

```
VALUES (100001,'02-DEC-23, B.C.')
```

*

ERROR at line 2:

ORA-01830: date format picture ends before converting entire input string

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100001,TO_DATE('02-DEC-23, B.C.','DD-MON-YY, A.D.'));
```

1 row created.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YYYY B.C.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-2023 A.D.
100001	02-DEC-2023 B.C.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YY, SYYYY, SCC A.D.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-23, 2023, 21 A.D.

Spool File For Oracle Students Prepared By Mr. Balram

100001 02-DEC-23, -2023, -21 B.C.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE, 'DD-MON-YY') SAMPDATE,
  4  TO_CHAR(SAMPDATE, 'J') JULIANNUM
  5  FROM SAMPTAB;
```

SAMPID	SAMPDATE	JULIANN
100000	02-DEC-23	2460281
100001	02-DEC-23	0982493

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100002, '2460281');
VALUES (100002, '2460281')
      *
```

ERROR at line 2:
ORA-01861: literal does not match format string

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100002, TO_DATE('2460281', 'J'));
```

1 row created.

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100003, TO_DATE('0982493', 'J'));
```

1 row created.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE, 'DD-MON-YYYY B.C.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-2023 A.D.
100001	02-DEC-2023 B.C.
100002	02-DEC-2023 A.D.
100003	02-DEC-2023 B.C.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE, 'DD-MON-YY, SYYYY, SCC A.D.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-23, 2023, 21 A.D.
100001	02-DEC-23, -2023, -21 B.C.
100002	02-DEC-23, 2023, 21 A.D.
100003	02-DEC-23, -2023, -21 B.C.

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100000,TO_DATE(0,'J'));
VALUES (100000,TO_DATE(0,'J'))
      *
```

```
ERROR at line 2:
ORA-01854: julian date must be between 1 and 5373484
```

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100000,TO_DATE(1,'J'));
```

1 row created.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YY, SYYYY, SCC A.D.') SAMPDATE
  4  FROM SAMPTAB;
```

SAMPID	SAMPDATE
100000	02-DEC-23, 2023, 21 A.D.
100001	02-DEC-23, -2023, -21 B.C.
100002	02-DEC-23, 2023, 21 A.D.
100003	02-DEC-23, -2023, -21 B.C.
100000	01-JAN-12, -4712, -48 B.C.

```
SQL> INSERT INTO SAMPTAB
  2  VALUES (100001,TO_DATE(5373484,'J'));
```

1 row created.

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YY, SYYYY, SCC A.D.') SAMPDATE
  4  FROM SAMPTAB;
```

```
ERROR:
ORA-01801: date format is too long for internal buffer
```

no rows selected

```
SQL> SELECT
  2  SAMPID,
  3  TO_CHAR(SAMPDATE,'DD-MON-YY, SYYYY, SCC A.D.') SAMPDATE
  4  FROM SAMPTAB;
```

```
ERROR:
ORA-01801: date format is too long for internal buffer
```

no rows selected

Spool File For Oracle Students Prepared By Mr. Balram

```
SQL> ED
Wrote file afiedt.buf
```

```
1  SELECT
2  SAMPID,
3  TO_CHAR(SAMPDATE,'DD-MON/SYYYY, SCC A.D.') SAMPDATE
4* FROM SAMPTAB
SQL> /
ERROR:
ORA-01801: date format is too long for internal buffer
```

no rows selected

```
SQL> SELECT
2  SAMPID,
3  TO_CHAR(SAMPDATE,'DD-MON-YY A.D.') SAMPDATE,
4  TO_CHAR(SAMPDATE,'J')
5  FROM SAMPTAB;
```

SAMPID	SAMPDATE	TO_CHAR
100000	02-DEC-23 A.D.	2460281
100001	02-DEC-23 B.C.	0982493
100002	02-DEC-23 A.D.	2460281
100003	02-DEC-23 B.C.	0982493
100000	01-JAN-12 B.C.	0000001
100001	31-DEC-99 A.D.	5373484

6 rows selected.

```
SQL> TRUNCATE TABLE SAMPTAB;
```

Table truncated.

```
SQL> INSERT INTO SAMPTAB
2  VALUES(100000,'25-DEC-19');
```

1 row created.

```
SQL> INSERT INTO SAMPTAB
2  VALUES(100001,'25-DEC-98');
```

1 row created.

SQL> --Change The Clock in your Laptops to year more than 2050 and again execute the above two insert statements.

SQL> --Follow the Chart given in the Material to understand the 4digit year how oracle takes.

```
SQL> SELECT
2  SAMPID,
3  TO_CHAR(SAMPDATE,'DD-MON/SYYYY A.D.') SAMPDATE,
4  TO_CHAR(SAMPDATE,'J')
```

Spool File For Oracle Students Prepared By Mr. Balram

```
5 FROM SAMPTAB;
```

SAMPID	SAMPDATE	TO_CHAR
100000	25-DEC/ 2019 A.D.	2458843
100001	25-DEC/ 1998 A.D.	2451173

```
SQL> INSERT INTO SAMPTAB
2 VALUES (100000, '25-DEC-19');
```

1 row created.

```
SQL> INSERT INTO SAMPTAB
2 VALUES (100001, '25-DEC-98');
```

1 row created.

```
SQL> SELECT
2 SAMPID,
3 TO_CHAR(SAMPDATE, 'DD-MON/SYYYY A.D.') SAMPDATE,
4 TO_CHAR(SAMPDATE, 'J')
5 FROM SAMPTAB;
```

SAMPID	SAMPDATE	TO_CHAR
100000	25-DEC/ 2019 A.D.	2458843
100001	25-DEC/ 1998 A.D.	2451173
100000	25-DEC/ 2119 A.D.	2495367
100001	25-DEC/ 2098 A.D.	2487698

```
SQL> SPPOOL OFF
```