

ORACLE



## Oracle Database App Developer

### What's New

#### Introducing Oracle Database 23c Free – Developer Release

Oracle Database is committed to giving developers what they want, how they want it. That's why we're giving developers several months to kick the tires on the new long-term support release of Oracle Database 23c before it's generally available. And for free!

### From the Desk of the Editor

I hope you like the new look and feel of the Oracle Application Developer newsletter. This is our chance to highlight better the stories you want and need while keeping your time to a minimum. I'd love to know what you think of the new layout. You can always email me with feedback, suggestions, comments, and corrections at [bill.sawyer@oracle.com](mailto:bill.sawyer@oracle.com).

### Top Stories

#### How to select the top-N rows per group with SQL in Oracle Database

Fetching the first N rows from a result set is easy with the fetch first clause. But what if you want the top-N rows in each group? There's no native syntax for this in SQL. In this story, you'll learn how to solve this.

[Read more!](#)

#### How to split comma-separated value strings into rows in Oracle DB

Often you receive a CSV string that you need to convert to rows. This story gives you the steps and the code examples to help you do this easily and quickly.

[Read more!](#)

#### Bulk data processing with BULK COLLECT and FORALL in PL/SQL

Collections are key elements in some of the powerful performance optimization features in PL/SQL. In this story, you'll learn the two most important of these features, BULK COLLECT and FORALL.

[Read more!](#)

### Developer Quiz

I write the following incomplete block:

```
DECLARE
  ts TIMESTAMP;
BEGIN
  /*ASSIGN*/
  DBMS_OUTPUT.put_line (TO_CHAR (ts, 'YYYY-MM-DD HH24:MI:SS.FF'));
END;
```

Which of the choices provides a replacement for the `/*ASSIGN*/` comment so that after the resulting block is executed, this text will be displayed on the screen:

2011-10-30 13:14:15.0000000000

#### Answer 1

```
ts := TIMESTAMP '2011-10-30 13:14:15.0000000000';
```

#### Answer 2

```
ts := TIMESTAMP '2011-10-30 13:14:15';
```

**Answer 3**`ts := TIMESTAMP '2011-10-30 13:14:15.000';`**Answer 4**`ts := TIMESTAMP '2011-10-30 13:14:15.0';`**Answer 5**`ts := TIMESTAMP '2011-10-30 13:14:15.000000000';`

Answer(s) are below.

**Oracle APEX News****Business Innovations Webcast Series for Oracle APEX:**

Watch the recording of our second session with our guest Nomura Research Institute (NRI), Japan's largest economic research and consulting firm and learn why NRI selected Oracle APEX as their low-code platform for app dev over 20 other vendors and saved 65% in human resources. Also learn why they are training 300+ developers on Oracle APEX to build its next-generation software.



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Get your Oracle APEX Foundations Badge! Enroll in this self-paced training course to build enterprise apps 20x faster with 100x less code. [Enroll the course totally for free!](#)

**Events and Event Replays****Oracle Cloud World Tour**

Join us in person for an inside look at how companies like yours are solving their most complex business challenges. You'll learn about the very latest innovations in cloud infrastructure, databases, and applications for your industry and discover how they can advance your cloud journey.

The upcoming events are Singapore, 4 April 2023 at the Marina Bay Sands Expo and Convention Centre, Tokyo, 14 April 2023 at the ANA InterContinental Tokyo, London, 19 April 2023 at ExCeL London, São Paulo, 27 April 2023 at Teatro Bravos, and Abu Dhabi, 3 May 2023 at the Abu Dhabi National Exhibition Centre (ADNEC).

[Register Singapore](#)

[Register Tokyo](#)

[Register London](#)

[Register São Paulo](#)

[Register Abu Dhabi](#)

**OUGN 2023**

Don't miss the Oracle User Group Norway's two-day conference at Rebel Oslo, taking place April 24-25, 2023. With seven (7) inspiring tracks, fantastic food, drinks, networking, great entertainment, and a buzzing expo this is sure to great event. [Ticket to OUGN 2023](#)

[Register Here](#)

**Quiz Answers:** 2, 3, and 5

**Ask Tom Events**

- [JSON in Oracle Database](#), April 11th.
- [Software Globalization](#), April 11th.
- [Database Security](#), April 12th.
- [.NET and Visual Studio \(Code\) – Oracle](#), April 12th.
- [Visual Builder](#), April 17th.

- [APEX – Japan](#), April 20th.
- [General Database](#), April 20th.
- [APEX](#), April 20th.



## Learn more... for free!

**Build Expertise** with hundreds of Oracle workshops on a variety of Oracle products, 24x7 for free, on [Oracle LiveLabs](#).

**Learn, Write, and Share SQL** at Oracle's interactive [Live SQL](#) site, built with Oracle APEX running on Oracle Database.

**Build Muscles** at Oracle [Dev Gym](#) by taking workouts, quizzes and even entire classes on SQL, PL/SQL, database design, logic and more.

**IN BETA:** [SQuizL](#), for fun and learning

## Useful links to keep your skills sharp

**Blogs:** [Oracle Developers](#) | [Oracle Database Insider](#) | [Oracle Cloud Infrastructure](#) | [Oracle APEX](#)

**Videos:** [Oracle's Database Product Management YouTube channel](#)

**Websites:** [Oracle Database](#) | [Oracle Autonomous Database](#) | [Oracle Developer Resource Center](#) | [Oracle Developer Tutorials](#)



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