



Relational Database Concepts

Oracle Data Types

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Objectives

- Learn about oracle data types used in create table statements.



What Are Data Types

- Each value manipulated by Oracle Database has a datatype.
- The datatype of a value associates a fixed set of properties with the value.
- These properties cause Oracle to treat values of one datatype differently from values of another.
- When you create a table, you must specify a datatype for each of its columns.
- Oracle Database provides a number of built-in datatypes as well as several categories for user-defined types that can be used as datatypes



Types Of Data Types

- **CHAR** - Is a fixed length character string or text. The number in parenthesis indicates the maximum length. The DBMS will always store the maximum length for CHAR columns. So you should use this data type for columns with the same length, such as two character abbreviations for state names.
- **VARCHAR** - Is a variable length character string. The number in parenthesis indicates the maximum length. The DBMS will always store the length actually used for the value, not the maximum length. So you should use this data type for columns of varying length, such as student names.
- Note that Oracle uses **VARCHAR2** instead of the SQL standard VARCHAR.



Types Of Data Types

- **INTEGER** indicates a whole number, for example, numbers without a decimal point. Use this data type for columns with numbers such as age in years.
- **FLOAT** indicates a number with a floating precision such as interest rates and scientific calculations.
- **Decimal** indicates a number with a fixed precision, such as monetary amounts.