

Database Programming with SQL 13-1: Creating Tables

Practice Activities

# Objectives

* List and categorize the main database objects
* Review a table structure
* Describe how database schema objects are used by the Oracle database

# Vocabulary

Identify the vocabulary word for each definition below.

|  |  |
| --- | --- |
| **Data dictionary** | Created and maintained by the Oracle Server and contains information about the database |
| **Schema** | A collection of objects that are the logical structures that directly refer to the data in the database |
| **DEFAULT** | Specifies a preset value if a value is omitted in the INSERT statement |
| **TABLE** | Stores data; basic unit of storage composed of rows and columns |
| **CREATE TABLE** | Command use to make a new table |

# Try It / Solve It

1. Complete the GRADUATE CANDIDATE table instance chart. Credits is a foreign-key column referencing the requirements table.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Column Name | student\_id | last\_name | first\_name | credits | graduation\_date |
| Key Type | Primary key |  |  | Foreign key |  |
| Nulls/Unique | NO/YES | NO/NO | NO/NO | No/NO | YES/NO |
| FK Column |  |  |  | credits |  |
| Datatype | NUMBER | VARCHAR2 | VARCHAR2 | NUMBER | DATE |
| Length | 6 |  |  | 3 |  |

1. Write the syntax to create the grad\_candidates table.

CREATE TABLE graduate\_candidates

( student\_id NUMBER(6,0),

last\_name VARCHAR2(75) CONSTRAINT gcs\_last\_name\_nn NOT NULL ENABLE,

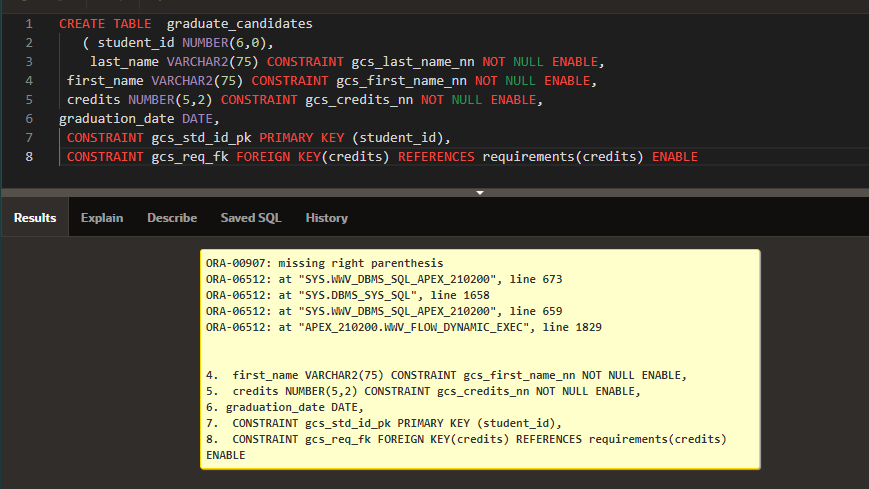
first\_name VARCHAR2(75) CONSTRAINT gcs\_first\_name\_nn NOT NULL ENABLE,

credits NUMBER(5,2) CONSTRAINT gcs\_credits\_nn NOT NULL ENABLE,

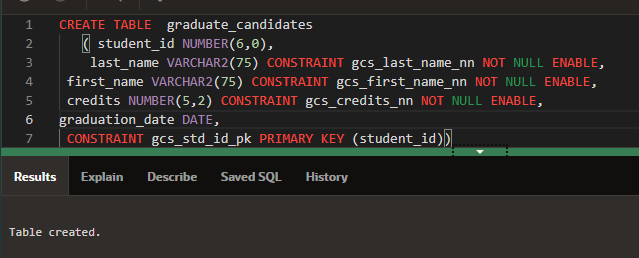
graduation\_date DATE,

CONSTRAINT gcs\_std\_id\_pk PRIMARY KEY (student\_id),

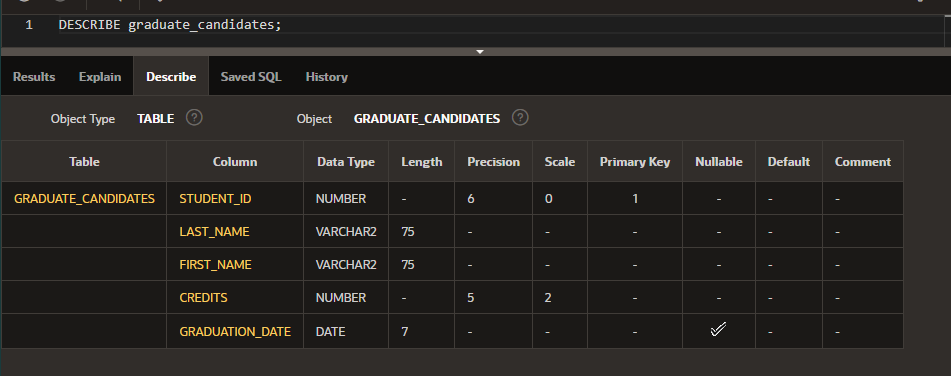
CONSTRAINT gcs\_req\_fk FOREIGN KEY(credits) REFERENCES requirements(credits) ENABLE



Так как credits не существует, без нее создастся



1. Confirm creation of the table using DESCRIBE.



1. Create a new table using a subquery. Name the new table your last name -- e.g., smith\_table. Using a subquery, copy grad\_candidates into smith\_table.

CREATE TABLE Borisov\_Nikita\_Table

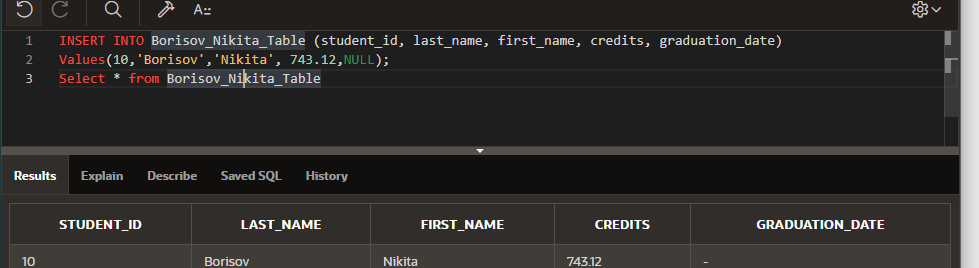
AS ( SELECT \* FROM graduate\_candidates);

1. Insert your personal data into the table created in question 4.

INSERT INTO Borisov\_Nikita\_Table (student\_id, last\_name, first\_name, credits, graduation\_date)

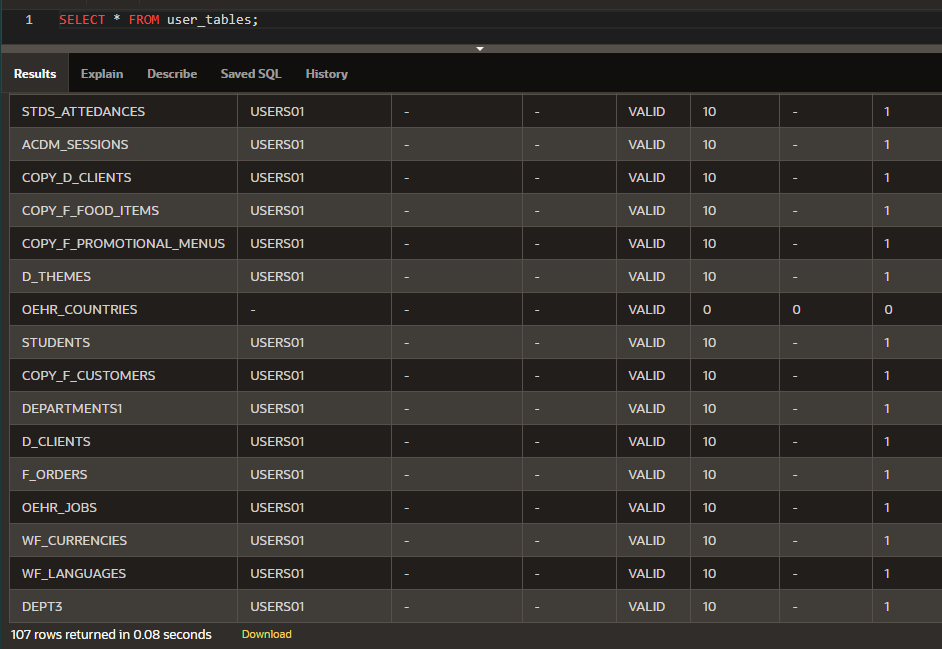
Values(10,'Borisov','Nikita', 743.12,NULL);

Select \* from Borisov\_Nikita\_Table

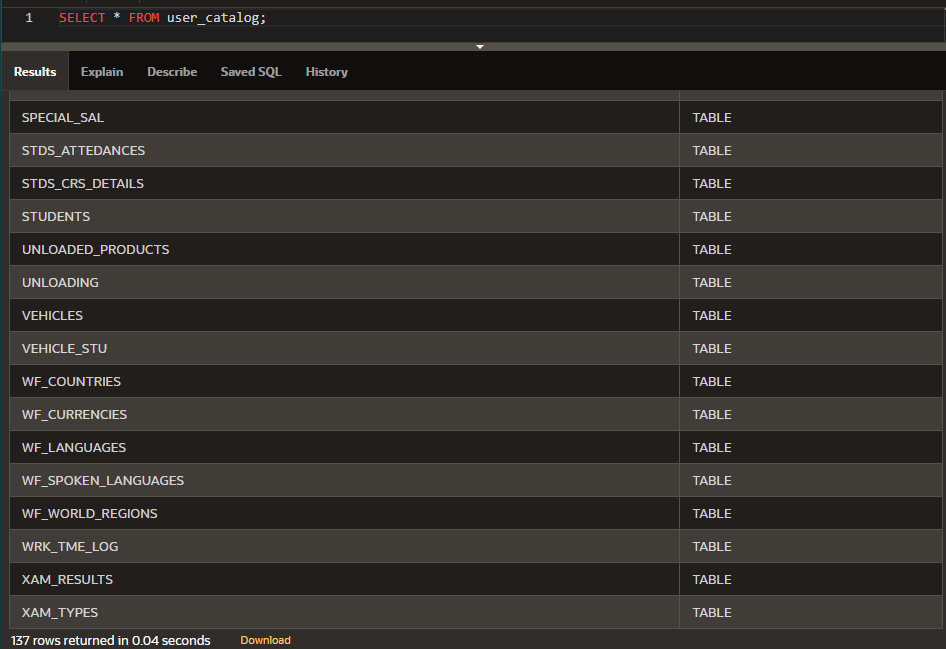


1. Query the data dictionary for each of the following:
   * USER\_TABLES
   * USER\_OBJECTS
   * USER\_CATALOG or USER\_CAT

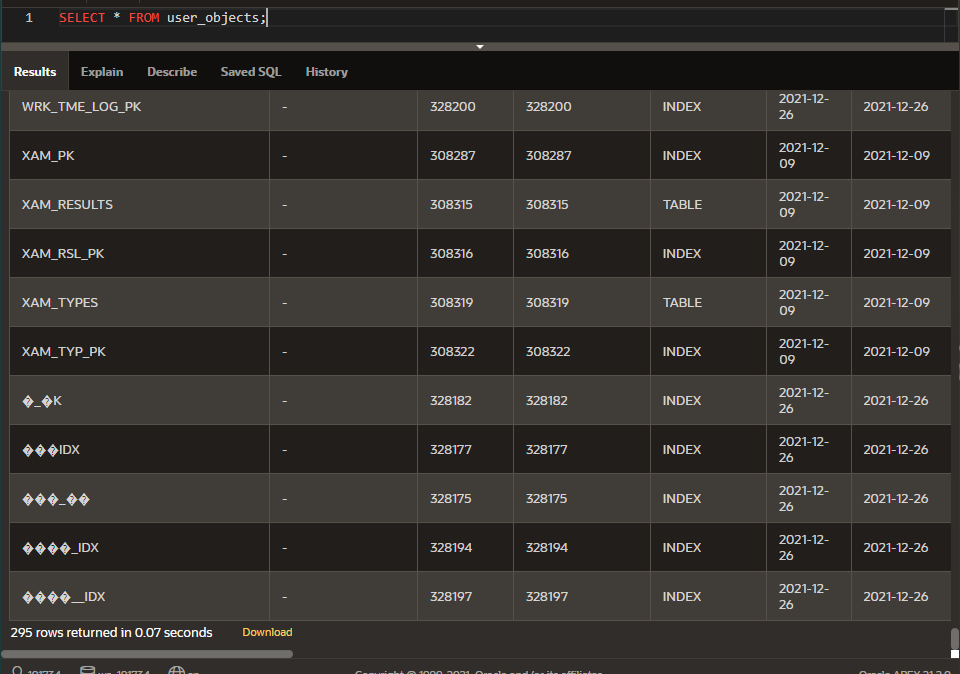
In separate sentences, summarize what each query will return.



Количество таблиц моего пользователя



Выводит индексы, таблицы, представления, кластеры, синонимы и последовательности



Все объекты моего пользователя (текущего)

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