

Database Programming with SQL

13-1: Creating Tables

Practice Solutions

Vocabulary

Directions: 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 used 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.

Solution:

Column Name	student_id	last_name	first_name	credits	graduation_date
Key Type					
Nulls/Unique					
FK Column					
Datatype	NUMBER	VARCHAR2	VARCHAR2	NUMBER	DATE
Length	6			3	

2. Write the syntax to create the grad_candidates table.

Solution:

```
CREATE TABLE grad_candidates  
(student_id NUMBER(6),  
last_name VARCHAR2(15),  
first_name VARCHAR2(15),  
credits NUMBER (3),  
graduation_date DATE);
```

3. Confirm creation of the table using DESCRIBE.

Solution:

```
DESCRIBE grad_candidates;
```

4. 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.

Solution:

```
CREATE TABLE smith_table AS  
(SELECT student_id,last_name,  
first_name,  
credits,  
graduation_date  
FROM grad_candidates);
```

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

Solution:

```
INSERT INTO smith_table (student_id,last_name,first_name,credits,graduation_date)  
VALUES ( ANSWERS WILL VARY...)
```

6. 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.

Solution:

Make these questions that the students must answer, i.e. "What code would you use to see the names of all tables owned by you?"

To see the names of tables owned by the user (you):

```
SELECT table_name  
FROM user_tables
```

To view distinct object types owned by the user:

```
SELECT DISTINCT object_type  
FROM user_objects;
```

To view all objects owned by the user:

```
SELECT *  
FROM user_catalog;
```