

1. Allows a foreign key row that is referenced to a primary key row to be deleted: ON DELETE CASCADE
2. Explicitly defines a condition that must be met: Check Constraint
3. A column or set of columns that uniquely identifies each row in a table: Primary Key
4. Constraint ensures that the column contains no null values: Not Null Constraint
5. Allows a child row to remain in a table with null values when a parent record has been deleted: ON DELETE SET NULL
6. Establishes a relationship between the foreign key column and a primary key or unique key in the same table or a different table: Foreign Key Constraint

1.
 - a. A primary key ensures that each row in a table is uniquely identifiable and that the column contains no null values.
 - b. A foreign key enforces referential integrity between tables by establishing a relationship between the foreign key in one table and the primary key in another
 - c. A check constraint ensures that the values in a column meet a specific condition, enhancing data accuracy and consistency.
2. Primary Key: animal_id
 Unique Constraint: license_tag_number
 NOT NULL Constraints: admit_date, vaccination_date
3. CREATE TABLE animals (

 animal_id NUMBER(6) PRIMARY KEY,

 name VARCHAR2(25),

 license_tag_number NUMBER(10),

 admit_date DATE NOT NULL,

 adoption_id NUMBER(5),

 vaccination_date DATE NOT NULL,

 CONSTRAINT unique_license_tag UNIQUE (license_tag_number)

);
4. INSERT INTO animals (animal_id, name, license_tag_number, admit_date, adoption_id, vaccination_date)

VALUES (101, 'Spot', 35540, TO_DATE('10-Oct-2004', 'DD-Mon-YYYY'), 205,

TO_DATE('12-Oct-2004', 'DD-Mon-YYYY'));

 SELECT * FROM animals;
5. INSERT INTO animals (animal_id, name, license_tag_number, admit_date, adoption_id, vaccination_date)

VALUES (101, 'Spot', 35540, TO_DATE('10-Oct-2004', 'DD-Mon-YYYY'), 205,

TO_DATE('12-Oct-2004', 'DD-Mon-YYYY'));

 SELECT * FROM animals;
6. CREATE TABLE animals (

 adoption_id NUMBER(5),

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CONSTRAINT fk_adoption FOREIGN KEY (adoption_id) REFERENCES  
adoptions(adoption_id)  
);
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7. DELETE CASCADE automatically deletes child rows in the animals table when the referenced parent row in the adoptions table is deleted and DELETE SET NULL sets the adoption_id in the animals table to NULL when the referenced parent row is deleted, preserving the child row but breaking the relationship.
8. CHECK Constraints cannot reference other columns or tables, they cannot use subqueries and the condition must be a Boolean expression that returns TRUE or FALSE.