

## Create Table Queries

1. Write a SQL statement to create a simple table countries including columns country\_id, country\_name and region\_id.
2. Write a SQL statement to create a simple table countries including columns country\_id, country\_name and region\_id which already exist.
3. Write a SQL statement to create the structure of a table dup\_countries similar to countries
4. Write a SQL statement to create a duplicate copy of countries table including structure and data by name dup\_countries.
5. Write a SQL statement to create a table countries set a constraint NULL.
6. Write a SQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary, max\_salary and check whether the max\_salary amount exceeding the upper limit 25000.
7. Write a SQL statement to create a table named countries including columns country\_id, country\_name and region\_id and make sure that no countries except Italy, India and China will be entered in the table.
8. Write a SQL statement to create a table named countries including columns country\_id, country\_name and region\_id and make sure that no duplicate data against column country\_id will be allowed at the time of insertion.
9. Write a SQL statement to create a table named jobs including columns job\_id, job\_title, min\_salary and max\_salary, and make sure that, the default value for job\_title is blank and min\_salary is 8000 and max\_salary is NULL will be entered automatically at the time of insertion if no value assigned for the specified columns.
10. Write a SQL statement to create a table named countries including columns country\_id, country\_name and region\_id and make sure that the country\_id column will be a key field which will not contain any duplicate data at the time of insertion.
11. Write a SQL statement to create a table countries including columns country\_id, country\_name and region\_id and make sure that the column country\_id will be unique and store an auto-incremented value.

12. Write a SQL statement to create a table countries including columns country\_id, country\_name and region\_id and make sure that the combination of columns country\_id and region\_id will be unique.
13. Write a SQL statement to create a table job\_history including columns employee\_id, start\_date, end\_date, job\_id and department\_id and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion and the foreign key column job\_id contain only those values which exist in the jobs table.

Here is the structure of the table jobs;

Column	Type	Modifiers
job_id	character varying(10)	not null default ''::character varying
job_title	character varying(35)	not null
min_salary	numeric(6,0)	default NULL::numeric
max_salary	numeric(6,0)	default NULL::numeric
Indexes:		
"jobs_pkey" PRIMARY KEY, btree (job_id)		

14. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, email, phone\_number hire\_date, job\_id, salary, commission, manager\_id and department\_id and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion and the foreign key columns combined by department\_id and manager\_id columns contain only those unique combination values, which combinations exist in the departments table.

Assume the structure of departments table below.

Column	Type	Modifiers
department_id	numeric(4,0)	not null
department_name	character varying(30)	not null
manager_id	numeric(6,0)	not null default NULL::numeric
location_id	numeric(4,0)	default NULL::numeric
Indexes:		
"departments_pkey" PRIMARY KEY, btree (department_id, manager_id)		

15. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, email, phone\_number hire\_date, job\_id, salary, commission, manager\_id and department\_id and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion, and the foreign key column department\_id, reference by

the column department\_id of departments table, can contain only those values which exist in the departments table and another foreign key column job\_id, referenced by the column job\_id of jobs table, can contain only those values which exist in the jobs table.

Assume that the structure of two tables departments and jobs.

Column	Type	Modifiers
department_id	numeric(4,0)	not null
department_name	character varying(30)	not null
manager_id	numeric(6,0)	default NULL::numeric
location_id	numeric(4,0)	default NULL::numeric
Indexes:		
"departments_pkey" PRIMARY KEY, btree (department_id)		

  

Column	Type	Modifiers
job_id	character varying(10)	not null default ''::character varying
job_title	character varying(35)	not null
min_salary	numeric(6,0)	default NULL::numeric
max_salary	numeric(6,0)	default NULL::numeric
Indexes:		
"jobs_pkey" PRIMARY KEY, btree (job_id)		

16. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, job\_id, salary and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion, and the foreign key column job\_id, referenced by the column job\_id of jobs table, can contain only those values which exist in the jobs table. The specialty of the statement is that the ON UPDATE CASCADE action allows you to perform the cross-table update and ON DELETE RESTRICT action rejects the deletion. The default action is ON DELETE RESTRICT.

Assume that the following is the structure of the table jobs.

```
CREATE TABLE IF NOT EXISTS jobs (  
  JOB_ID INTEGER NOT NULL UNIQUE PRIMARY KEY,  
  JOB_TITLE varchar(35) NOT NULL DEFAULT ' ',  
  MIN_SALARY decimal(6,0) DEFAULT 8000,  
  MAX_SALARY decimal(6,0) DEFAULT NULL  
);
```

Column	Type	Modifiers
job_id	integer	not null
job_title	character varying(35)	not null default ' '::character varying
min_salary	numeric(6,0)	default 8000
max_salary	numeric(6,0)	default NULL::numeric

Indexes:  
"jobs\_pkey" PRIMARY KEY, btree (job\_id)

17. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, job\_id, salary and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion, and the foreign key column job\_id, referenced by the column job\_id of jobs table, can contain only those values which exist in the jobs table. The specialty of the statement is that the ON DELETE CASCADE that lets you allow to delete records in the employees(child) table that refers to a record in the jobs(parent) table when the record in the parent table is deleted and the ON UPDATE RESTRICT actions reject any updates.

Assume that the following is the structure of the table jobs.

```
CREATE TABLE IF NOT EXISTS jobs (  
  JOB_ID INTEGER NOT NULL UNIQUE PRIMARY KEY,  
  JOB_TITLE varchar(35) NOT NULL DEFAULT ' ',  
  MIN_SALARY decimal(6,0) DEFAULT 8000,  
  MAX_SALARY decimal(6,0) DEFAULT NULL  
);
```

Column	Type	Modifiers
job_id	integer	not null
job_title	character varying(35)	not null default ' '::character varying
min_salary	numeric(6,0)	default 8000
max_salary	numeric(6,0)	default NULL::numeric

Indexes:  
"jobs\_pkey" PRIMARY KEY, btree (job\_id)

18. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, job\_id, salary and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion, and the foreign key column job\_id, referenced by the column job\_id of jobs table, can contain only those values which exist in the jobs table. The specialty of the statement is that the ON DELETE SET NULL action will set the foreign key column values in the child table(employees) to NULL when the record in the parent table(jobs) is deleted, with a condition that the foreign key column in the child table must accept NULL values and the ON UPDATE SET NULL action resets the values in the rows in the child table(employees) to NULL values when the rows in the parent table(jobs) are updated.

Assume that the following is the structure of two table jobs.

```
CREATE TABLE IF NOT EXISTS jobs (
  JOB_ID INTEGER NOT NULL UNIQUE PRIMARY KEY,
  JOB_TITLE varchar(35) NOT NULL DEFAULT ' ',
  MIN_SALARY decimal(6,0) DEFAULT 8000,
  MAX_SALARY decimal(6,0) DEFAULT NULL
);
```

Column	Type	Modifiers
job_id	integer	not null
job_title	character varying(35)	not null default ' '::character varying
min_salary	numeric(6,0)	default 8000
max_salary	numeric(6,0)	default NULL::numeric

Indexes:

```
"jobs_pkey" PRIMARY KEY, btree (job_id)
```

19. Write a SQL statement to create a table employees including columns employee\_id, first\_name, last\_name, job\_id, salary and make sure that, the employee\_id column does not contain any duplicate value at the time of insertion, and the foreign key column job\_id, referenced by the column job\_id of jobs table, can contain only those values which exist in the jobs table. The specialty of the statement is that, The ON DELETE NO ACTION and the ON UPDATE NO ACTION actions will reject the deletion and any updates.



Assume that the following is the structure of two table jobs.

```
CREATE TABLE IF NOT EXISTS jobs (  
  JOB_ID INTEGER NOT NULL UNIQUE PRIMARY KEY,  
  JOB_TITLE varchar(35) NOT NULL DEFAULT ' ',  
  MIN_SALARY decimal(6,0) DEFAULT 8000,  
  MAX_SALARY decimal(6,0) DEFAULT NULL  
);
```

Column	Type	Modifiers
job_id	integer	not null
job_title	character varying(35)	not null default ' '::character varying
min_salary	numeric(6,0)	default 8000
max_salary	numeric(6,0)	default NULL::numeric
Indexes:		
"jobs_pkey" PRIMARY KEY, btree (job_id)		