

## SQL Exercises – Data Definition Language (DDL)

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 the structure of a table **dup\_countries** similar to **countries** (a copy of the first table).
3. Write a SQL statement to create a table **countries** set a constraint **NULL**.
4. 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**.
5. 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.
6. Write a SQL statement to create a table named **job\_history** including columns **employee\_id**, **start\_date**, **end\_date**, **job\_id** and **department\_id** and make sure that the value against column **end\_date** will be entered at the time of insertion greater than the current date.
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 duplicate data against column **country\_id** will be allowed at the time of insertion.
8. 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.
9. 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.
10. 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.
11. 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 are exists 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 are exists in the **jobs** table.

Assume that the structure of two tables **departments** and **jobs**.

Field	Type	Null	Key	Default	Extra
DEPARTMENT_ID	decimal(4,0)	NO	PRI	0	
DEPARTMENT_NAME	varchar(30)	NO		NULL	
MANAGER_ID	decimal(6,0)	YES		NULL	
LOCATION_ID	decimal(4,0)	YES		NULL	

Field	Type	Null	Key	Default	Extra
JOB_ID	varchar(10)	NO	PRI		
JOB_TITLE	varchar(35)	NO		NULL	
MIN_SALARY	decimal(6,0)	YES		NULL	
MAX_SALARY	decimal(6,0)	YES		NULL	