**(Refer earlier exercise to known about tables used in this)**

**1.**  Write a SQL statement to rename the table countries to country\_new.

ALTER TABLE countries RENAME country\_new;

**2.** Write a SQL statement to add a column region\_id to the table locations.

ALTER TABLE locations

ADD region\_id INT;

**3.** Write a SQL statement to add a columns ID as the first column of the table locations.

ALTER TABLE locations

ADD ID INT FIRST;

**4.** Write a SQL statement to add a column region\_id after state\_province to the table locations.

ALTER TABLE locations

ADD region\_id INT

AFTER state\_province;

**5.** Write a SQL statement change the data type of the column country\_id to integer in the table locations.

ALTER TABLE locations

MODIFY country\_id INT;

**6.** Write a SQL statement to drop the column city from the table locations.

ALTER TABLE locations

DROP city;

**7.** Write a SQL statement to change the name of the column state\_province to state, keeping the data type and size same.

ALTER TABLE locations

DROP state\_province,

ADD state varchar(25)

AFTER city;

ALTER TABLE locations

CHANGE state\_province state varchar(25);

**8.** Write a SQL statement to add a primary key for the columns location\_id in the locations table.

Here is the sample table employees.

**Sample table: employees**

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| EMPLOYEE\_ID | FIRST\_NAME | LAST\_NAME | EMAIL | PHONE\_NUMBER | HIRE\_DATE | JOB\_ID | SALARY | COMMISSION\_PCT | MANAGER\_ID | DEPARTMENT\_ID |

+-------------+-------------+-------------+----------+--------------------+------------+------------+----------+----------------+------------+---------------+

| 100 | Steven | King | SKING | 515.123.4567 | 1987-06-17 | AD\_PRES | 24000.00 | 0.00 | 0 | 90 |

| 101 | Neena | Kochhar | NKOCHHAR | 515.123.4568 | 1987-06-18 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 102 | Lex | De Haan | LDEHAAN | 515.123.4569 | 1987-06-19 | AD\_VP | 17000.00 | 0.00 | 100 | 90 |

| 103 | Alexander | Hunold | AHUNOLD | 590.423.4567 | 1987-06-20 | IT\_PROG | 9000.00 | 0.00 | 102 | 60 |

| 104 | Bruce | Ernst | BERNST | 590.423.4568 | 1987-06-21 | IT\_PROG | 6000.00 | 0.00 | 103 | 60 |

| 105 | David | Austin | DAUSTIN | 590.423.4569 | 1987-06-22 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 106 | Valli | Pataballa | VPATABAL | 590.423.4560 | 1987-06-23 | IT\_PROG | 4800.00 | 0.00 | 103 | 60 |

| 107 | Diana | Lorentz | DLORENTZ | 590.423.5567 | 1987-06-24 | IT\_PROG | 4200.00 | 0.00 | 103 | 60 |

| 108 | Nancy | Greenberg | NGREENBE | 515.124.4569 | 1987-06-25 | FI\_MGR | 12000.00 | 0.00 | 101 | 100 |

| 109 | Daniel | Faviet | DFAVIET | 515.124.4169 | 1987-06-26 | FI\_ACCOUNT | 9000.00 | 0.00 | 108 | 100 |

| 110 | John | Chen | JCHEN | 515.124.4269 | 1987-06-27 | FI\_ACCOUNT | 8200.00 | 0.00 | 108 | 100 |

| 111 | Ismael | Sciarra | ISCIARRA | 515.124.4369 | 1987-06-28 | FI\_ACCOUNT | 7700.00 | 0.00 | 108 | 100 |

| 112 | Jose Manuel | Urman | JMURMAN | 515.124.4469 | 1987-06-29 | FI\_ACCOUNT | 7800.00 | 0.00 | 108 | 100 |

| 113 | Luis | Popp | LPOPP | 515.124.4567 | 1987-06-30 | FI\_ACCOUNT | 6900.00 | 0.00 | 108 | 100 |

| 114 | Den | Raphaely | DRAPHEAL | 515.127.4561 | 1987-07-01 | PU\_MAN | 11000.00 | 0.00 | 100 | 30 |

| 115 | Alexander | Khoo | AKHOO | 515.127.4562 | 1987-07-02 | PU\_CLERK | 3100.00 | 0.00 | 114 | 30 |

| 116 | Shelli | Baida | SBAIDA | 515.127.4563 | 1987-07-03 | PU\_CLERK | 2900.00 | 0.00 | 114 | 30 |

| 117 | Sigal | Tobias | STOBIAS | 515.127.4564 | 1987-07-04 | PU\_CLERK | 2800.00 | 0.00 | 114 | 30 |

| 118 | Guy | Himuro | GHIMURO | 515.127.4565 | 1987-07-05 | PU\_CLERK | 2600.00 | 0.00 | 114 | 30 |

ALTER TABLE locations

ADD PRIMARY KEY(location\_id);

**9.** Write a SQL statement to add a primary key for a combination of columns location\_id and country\_id.

ALTER TABLE locations

ADD PRIMARY KEY(location\_id,country\_id);

**10.** Write a SQL statement to drop the existing primary from the table locations on a combination of columns location\_id and country\_id.

ALTER TABLE locations DROP PRIMARY KEY;

**11.** Write a SQL statement to add a foreign key on job\_id column of job\_history table referencing to the primary key job\_id of jobs table.

ALTER TABLE job\_history

ADD FOREIGN KEY(job\_id)

REFERENCES jobs(job\_id);

**12.** Write a SQL statement to add a foreign key constraint named fk\_job\_id on job\_id column of job\_history table referencing to the primary key job\_id of jobs table.

ALTER TABLE job\_history

ADD CONSTRAINT fk\_job\_id

FOREIGN KEY (job\_id)

REFERENCES jobs(job\_id)

ON UPDATE RESTRICT

ON DELETE CASCADE;

**13.** Write a SQL statement to drop the existing foreign key fk\_job\_id from job\_history table on job\_id column which is referencing to the job\_id of jobs table.

ALTER TABLE job\_history

DROP FOREIGN KEY fk\_job\_id;

**14.** Write a SQL statement to add an index named indx\_job\_id on job\_id column in the table job\_history.

ALTER TABLE job\_history

ADD INDEX indx\_job\_id(job\_id);

**15.** Write a SQL statement to drop the index indx\_job\_id from job\_history table.

ALTER TABLE job\_history

DROP INDEX indx\_job\_id;