# Ex no: Employee Database using constraints

Date:

# AIM:

To create a fully functional employee database with proper constraints.

# Question No.1

Create a query to find the annual revenue that is collected by the different companies using the property table

**Query:** select office\_id,sum(prop.prop\_rent\*12) "Annual Revenue" from prop group by office\_id;

**Output:**

|  |  |
| --- | --- |
| OFFICE\_ID | Annual Revenue |
| 1207 | 678000 |
| 1208 | 1680000 |
| 1205 | 714000 |
| 1204 | 432000 |
| 1206 | 342000 |

# Question No.2

Create a query to find the inspection date, location of property and the rent using the inspection and property tables using joins

**Query:** select inspec.insp\_date, prop.prop\_city, prop.prop\_rent from prop left outer join inspec on inspec.prop\_id=prop.prop\_id;

**Output:**

|  |  |  |
| --- | --- | --- |
| INSP\_DATE | PROP\_CITY | PROP\_RENT |
| 12-JAN-15 | Sydney | 21000 |
| 08-FEB-15 | Berlin | 15000 |
| 27-MAR-16 | Zurich | 28000 |
| 15-APR-15 | Rome | 31500 |
| 07-DEC-15 | Kolkatta | 16000 |
| 10-OCT-15 | Agra | 12500 |
| 30-JUL-15 | Tokyo | 95000 |
| 16-OCT-15 | Paris | 35500 |
|  | Hong Kong | 45000 |
|  | Shimla | 21000 |

# Question No.3

Create a query to find when an employee is going to visit the property owned by the various companies

**Query:** select inspec.insp\_date, prop.prop\_city, employee.emp\_name from inspec,prop,employee where inspec.emp\_id=employee.emp\_num and inspec.prop\_id=prop.prop\_id;

**Output:**

|  |  |  |
| --- | --- | --- |
| INSP\_DATE | PROP\_CITY | EMP\_NAME |
| 10-OCT-15 | Agra | Sarulakshmi |
| 30-JUL-15 | Tokyo | Kenshin Himura |
| 16-OCT-15 | Paris | Relicum Eleon |
| 12-JAN-15 | Sydney | Tony Stark |
| 02-FEB-15 | Berlin | Johnny Gates |
| 27-MAR-16 | Zurich | Eleon Blade |
| 15-APR-15 | Rome | Drakkus Storm |
| 07-DEC-15 | Kolkatta | Gordon Ramsey |

# Question No.4

Create a query to find the rent paid per room and the location of the property with the company that owns it

**Query:** select round((p.prop\_rent/p.prop\_rooms),2) "Cost per room", p.prop\_city, o.office\_name from prop p,office o where p.office\_id=o.office\_num;

**Output:**

|  |  |  |
| --- | --- | --- |
| Cost per room | PROP\_CITY | OFFICE\_NAME |
| 3750 | Berlin | Stark Ind. |
| 4200 | Sydney | Stark Ind. |
| 9333.34 | Zurich | Storm Factory |
| 5250 | Rome | Storm Factory |
| 4000 | Kolkatta | Adam Lines |
| 4166.67 | Agra | Adam Lines |
| 4200 | Shimla | Eleon Estates |
| 5916.67 | Paris | Eleon Estates |

# Question No.5

Create a query to get the employee id and the location of all employees with their names

**Query: select emp\_num, concat(emp\_name,concat(' lives in ',emp\_city)) "Location" from employee;**

**Output:**

|  |  |
| --- | --- |
| EMP\_NUM | Location |
| 4624 | Tony Stark lives in New York |
| 4625 | Pepper Potts lives in New York |
| 4626 | Johnny Gates lives in New York |
| 4627 | Drakkus Storm lives in Goa |
| 4628 | Eleon Blade lives in London |
| 4629 | Adam Lambert lives in Paris |
| 4630 | Gordon Ramsey lives in Italy |
| 4631 | Sarulakshmi lives in Mumbai |
| 4632 | Relicum Eleon lives in New Delhi |

# Question No.6

Create a query to display the employee their location and the comment given by them for the property inspected by them

**Query:** select e.emp\_name, e.emp\_city, i.insp\_comment from employee e inner join inspec i on i.emp\_id=e.emp\_num;

**Output:**

|  |  |  |
| --- | --- | --- |
| EMP\_NAME | EMP\_CITY | INSP\_COMMENT |
| Sarulakshmi | Mumbai | Architecture is good. Some improvisions need to be done |
| Kenshin Himura | Tokyo | Information Classified. Details will be given after purchase or clearance only |
| Relicum Eleon | New Delhi | Infrastructure is defective but with little capital it can be fixed. Busy routes  with high passenger count |
| Tony Stark | New York | No Comment |
| Johnny Gates | New York | Infrastructure is defective but with little capital it can be fixed. Busy routes  with high passenger count |
| Eleon Blade | London | Infrastructure is defective but with little capital it can be fixed. Busy routes  with high passenger count |
| Drakkus Storm | Goa | Architecture is good. Some improvisions need to be done |
| Gordon Ramsey | Italy | No Comment |

# Question No.7

Create a query to list all cities present in both Employee and property tables using union

**Query:** select emp\_city "Cities Used" from employee union select prop\_city from prop;

**Output:**

|  |
| --- |
| Cities Used |
| Agra |
| Berlin |
| Goa |
| Hong Kong |
| Italy |
| Kolkatta |
| London |
| Mumbai |
| New Delhi |
| New York |
| Paris |
| Rome |
| Shimla |

# Question No.8

Create a query to select all details of employees who lives in a city that starts with “New”

**Query:** select emp\_num,emp\_name,emp\_phone from employee where emp\_city like 'New%';

**Output:**

|  |  |  |
| --- | --- | --- |
| EMP\_NUM | EMP\_NAME | EMP\_PHONE |
| 4624 | Tony Stark | 9841293456 |
| 4625 | Pepper Potts | 9941593644 |
| 4626 | Johnny Gates | 9845263414 |
| 4632 | Relicum Eleon | 5241602510 |

# Question No.9

Create a query to update property table where the city name of property is changed from ‘Kolkatta’ to ‘Bengaluru’ using Replace function and display the result

**Query:** update prop set prop\_city = replace(prop\_city,'Kolkatta','Bengaluru');

**Output:** 10 rows updates

**Query:** select \* from prop;

**Output:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| PROP\_ID | PROP\_CITY | PROP\_RENT | PROP\_ROOMS | OFFICE\_ID |
| 1265 | Berlin | 15000 | 4 | 1204 |
| 1684 | Sydney | 21000 | 5 | 1204 |
| 8524 | Zurich | 28000 | 3 | 1205 |
| 6512 | Rome | 31500 | 6 | 1205 |
| 9856 | Bengaluru | 16000 | 4 | 1206 |
| 7542 | Agra | 12500 | 3 | 1206 |
| 3285 | Paris | 35500 | 6 | 1207 |
| 1001 | Hong Kong | 45000 | 9 | 1208 |
| 1002 | Tokyo | 95000 | 8 | 1208 |

# Question No.10

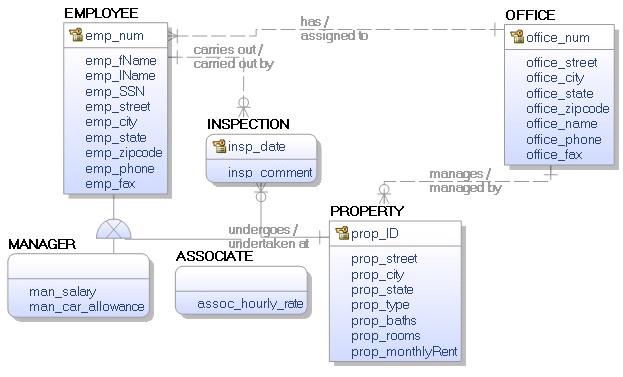
Create a query to select distinct companies with their details which owns properties that have more than 5 rooms

**Query:** select office\_num,office\_name,office\_city from office where office\_num in (select office\_id from prop where prop\_rooms>5);

**Output:**

|  |  |  |
| --- | --- | --- |
| OFFICE\_NUM | OFFICE\_NAME | OFFICE\_CITY |
| 1205 | Storm Factory | Chennai |
| 1207 | Eleon Estate | New Delhi |
| 1208 | SHIELD | California |

# ER DIAGRAM



# RESULT

The desired queries were created and the output was verified and noted down.