

MySQL Workbench

UNP\_Human\_Resource\_G11

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Navigator: UNP\_Human\_Resource\_G11 Questions

SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
1  -- Step - 1 [Creating the Schemas]
2
3  • create database Human_Resources;
4  • use Human_Resources;
5
6  • create table EmpDepartments (
7    DepartmentID int Primary key,
8    DepartmentName varchar(312),
9    DepartmentDesc varchar(312),
10   NumberOfEmployees int
11 );
12
13 • create table EmpDetails (
14   EmpID int Primary key,
15   EmpFullName varchar(208),
16   Gender varchar(208),
17   MaritalStatus varchar(208),
18   HispanicLatino varchar(208),
19   RaceDesc varchar(208),
20   City varchar(208),
21   DepartmentName varchar(208),
22   DepartmentID int,
23   Position varchar(208),
24   PositionID int,
25   Salary int,
26   RecruitmentSource varchar(208)
```

Object Info Session

Type here to search

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SCHEMAS

Filter objects

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- world

Administration Schemas

Information

No object selected

```
13 • create table EmpDetails (  
14     EmpID int Primary key,  
15     EmpFullName varchar(208),  
16     Gender varchar(208),  
17     MaritalStatus varchar(208),  
18     HispanicLatino varchar(208),  
19     RaceDesc varchar(208),  
20     City varchar(208),  
21     DepartmentName varchar(208),  
22     DepartmentID int,  
23     Position varchar(208),  
24     PositionID int,  
25     Salary int,  
26     RecruitmentSource varchar(208)  
27 );  
28  
29 • create table EmpPerformance (  
30     EmpID int Primary key,  
31     EmpFullName varchar(312),  
32     DepartmentName varchar(312),  
33     DepartmentID int, FOREIGN KEY (DepartmentID) REFERENCES EmpDepartments(DepartmentID),  
34     ManagerName varchar(312),  
35     PerformanceRating varchar(312),  
36     EngagementSurvey float,  
37     EmpSatisfaction float,  
38     DaysLateLast30 int,
```

Object Info Session

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Limit to 1000 rows

SCHEMAS

Filter objects

human\_resources

- Tables
- Views
- Stored Procedures
- Functions

human\_resources\_backup

world

Administration Schemas

Information

No object selected

```
28
29 • create table EmpPerformance (
30     EmpID int Primary key,
31     EmpFullName varchar(312),
32     DepartmentName varchar(312),
33     DepartmentID int, FOREIGN KEY (DepartmentID) REFERENCES EmpDepartments(DepartmentID),
34     ManagerName varchar(312),
35     PerformanceRating varchar(312),
36     EngagementSurvey float,
37     EmpSatisfaction float,
38     DaysLateLast30 int,
39     Absences int
40 );
41
42 -- Step-2(1) [Creating Human_Resources_Backup and importing tables and transformation]
43
44 • create database Human_Resources_Backup;
45 • use Human_Resources_Backup;
46
47 • alter table EmpDepartments
48     modify column DepartmentID int Primary key,
49     modify column DepartmentName varchar(312),
50     modify column DepartmentDesc varchar(312),
51     modify column NumberOfEmployees int;
52
53 • alter table EmpDetails
```

Object Info Session

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SCHEMAS

Filter objects

- human\_resources
  - Tables
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- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

Object Info Session

```
42 -- Step-2(1) [Creating Human_Resources_Backup and importing tables and transformation]
43
44 • create database Human_Resources_Backup;
45 • use Human_Resources_Backup;
46
47 • alter table EmpDepartments
48   modify column DepartmentID int Primary key,
49   modify column DepartmentName varchar(312),
50   modify column DepartmentDesc varchar(312),
51   modify column NumberofEmployees int;
52
53 • alter table EmpDetails
54   modify column EmpID int Primary key,
55   modify column EmpFullName varchar(208),
56   modify column Gender varchar(208),
57   modify column MaritalStatus varchar(208),
58   modify column HispanicLatino varchar(208),
59   modify column RaceDesc varchar(208),
60   modify column City varchar(208),
61   modify column DepartmentName varchar(208),
62   modify column DepartmentID int,
63   modify column Position varchar(208),
64   modify column PositionID int,
65   modify column Salary int,
66   modify column RecruitmentSource varchar(208);
67
```

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Administration Schemas

Information

No object selected

```
67
68 • alter table EmpPerformance
69   modify column EmpID int Primary key,
70   modify column EmpFullName varchar(312),
71   modify column DepartmentName varchar(312),
72   modify column DepartmentID int,
73   modify column ManagerName varchar(312),
74   modify column PerformanceRating varchar(312),
75   modify column EngagementSurvey float,
76   modify column EmpSatisfaction float,
77   modify column DaysLateLast30 int,
78   modify column Absences int;
79
80
81 -- Step - 2(2) [Inserting into Human_Resources ]
82
83 • use Human_resources_backup;
84
85 • INSERT INTO Human_Resources.EmpPerformance (EmpID, EmpFullName, DepartmentName, DepartmentID, ManagerName, PerformanceRating, EngagementSurvey, EmpSatisfaction, DaysLateLast30, Absences
86   SELECT EmpID, EmpFullName, DepartmentName, DepartmentID, ManagerName, PerformanceRating, EngagementSurvey, EmpSatisfaction, DaysLateLast30, Absences
87   FROM EmpPerformance;
88
89 • INSERT INTO Human_Resources.EmpDetails (EmpID, EmpFullName, Gender, MaritalStatus, HispanicLatino, RaceDesc, City, DepartmentName, DepartmentID, Position, PositionID, Salary, RecruitmentDate)
90   SELECT EmpID, EmpFullName, Gender, MaritalStatus, HispanicLatino, RaceDesc, City, DepartmentName, DepartmentID, Position, PositionID, Salary, RecruitmentDate
91   FROM EmpDetails;
92
```

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SCHEMAS

Filter objects

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Administration Schemas Information

No object selected

```
79
80
81 -- Step - 2(2) [Inserting into Human_Resources ]
82
83 • use Human_resources_backup;
84
85 • INSERT INTO Human_Resources.EmpPerformance (EmpID, EmpFullName, DepartmentName, DepartmentID, ManagerName, PerformanceRating, EngagementSurvey, EmpSatis
86 SELECT EmpID, EmpFullName, DepartmentName, DepartmentID, ManagerName, PerformanceRating, EngagementSurvey, EmpSatisfaction, DaysLateLast30, Absences
87 FROM EmpPerformance;
88
89 • INSERT INTO Human_Resources.EmpDetails (EmpID, EmpFullName, Gender, MaritalStatus, HispanicLatino, RaceDesc, City, DepartmentName, DepartmentID, Positio
90 SELECT EmpID, EmpFullName, Gender, MaritalStatus, HispanicLatino, RaceDesc, City, DepartmentName, DepartmentID, Position, PositionID, Salary, Recruitmen
91 FROM EmpDetails;
92
93 • INSERT INTO Human_Resources.EmpDepartments (DepartmentID, DepartmentName, DepartmentDesc, NumberofEmployees)
94 SELECT DepartmentID, DepartmentName, DepartmentDesc, NumberofEmployees
95 FROM EmpDepartments;
96
97 -- Step-3 SQL Queries
98
99 -- Questions
100
101
102 -- 1. Number of employees from each city.
103
104 • use Human_Resources;
```

Object Info Session

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
102 -- 1. Number of employees from each city.
103
104 use Human_Resources;
105 SELECT City, COUNT(*) AS NumEmployees
106 FROM EmpDetails
107 GROUP BY City;
108
109 -- 2. Average salary by RaceDesc.
110
```

Result Grid

City	NumEmployees
Boston	177
Sacramento	1
Hartford	5
Austin	3
Bismarck	1
Montpelier	2
Raleigh	1
Atlanta	1
Salt Lake City	1
Tallahassee	1
Frankfort	1
Boise	1
Salem	1
Albany	1
Concord	1
Phoenix	1
Denver	1

Object Info Session Result 1 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
107 GROUP BY City;
108
109 -- 2. Average salary by RaceDesc.
110
111 • use Human_Resources;
112 • SELECT RaceDesc, AVG(Salary) AS AvgSalary
113 FROM EmpDetails
114 GROUP BY RaceDesc;
115
116
117 -- 3. Department with the highest employees.
118
119 • use Human_Resources;
120 • SELECT DepartmentName, COUNT(*) AS NumEmployees
121 FROM EmpDetails
```

Result Grid

RaceDesc	AvgSalary
White	69317.0726
Black or African American	76124.9412
American Indian or Alaska Native	65806.0000
Asian	70384.9500
Two or more races	58399.0000
Hispanic	83667.0000

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
111 • use Human_Resources;
112 • SELECT RaceDesc, AVG(Salary) AS AvgSalary
113 FROM EmpDetails
114 GROUP BY RaceDesc;
115
116
117 -- 3. Department with the highest employees.
118
119 • use Human_Resources;
120 • SELECT DepartmentName, COUNT(*) AS NumEmployees
121 FROM EmpDetails
122 GROUP BY DepartmentName
123 ORDER BY NumEmployees DESC
124 LIMIT 1;
125
```

Result Grid

DepartmentName	NumEmployees
Production	126

Object Info Session Result 3 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
123 ORDER BY NumEmployees DESC
124 LIMIT 1;
125
126
127 -- 4. Department with the highest salary.
128
129 • use Human_Resources;
130 • SELECT DepartmentName, AVG(Salary) AS AvgSalary
131 FROM EmpDetails
132 GROUP BY DepartmentName
133 ORDER BY AvgSalary DESC
134 LIMIT 1;
135
136
137 -- 5. Average salary per gender.
```

Result Grid

DepartmentName	AvgSalary
Executive Office	250000.0000

Object Info Session Result 4 x

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SCHEMAS

Filter objects

human\_resources

- Tables
- Views
- Stored Procedures
- Functions

human\_resources\_backup

world

Administration Schemas

Information

No object selected

```
132 GROUP BY DepartmentName
133 ORDER BY AvgSalary DESC
134 LIMIT 1;
135
136
137 -- 5. Average salary per gender.
138
139 • use Human_Resources;
140 • SELECT Gender, AVG(Salary) AS AvgSalary
141 FROM EmpDetails
142 GROUP BY Gender;
143
144
145 -- 6. Top Earning Positions.
146
```

Result Grid

	Gender	AvgSalary
▶	M	71303.9451
	F	70215.5690

Object Info Session Result 5 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
144
145 -- 6. Top Earning Positions.
146
147 • use Human_Resources;
148 • SELECT Position, AVG(Salary) AS AvgSalary
149 FROM EmpDetails
150 GROUP BY Position
151 ORDER BY AvgSalary DESC;
152
153
154 -- 7. Number of employees from the source of recruitment.
155
156 • use Human_Resources;
157 • SELECT RecruitmentSource, COUNT(*) AS NumEmployees
```

Result Grid

Position	AvgSalary
President & CEO	250000.0000
CIO	220450.0000
Director of Sales	180000.0000
IT Director	178000.0000
Director of Operations	170500.0000
IT Manager - Infra	157000.0000
Data Architect	150290.0000
IT Manager - DB	140920.0000
IT Manager - Support	138888.0000
BI Director	110929.0000
Database Administrator	101849.5000

Object Info Session Result 6 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
150 GROUP BY Position
151 ORDER BY AvgSalary DESC;
152
153
154 -- 7. Number of employees from the source of recruitment.
155
156 • use Human_Resources;
157 • SELECT RecruitmentSource, COUNT(*) AS NumEmployees
158 FROM EmpDetails
159 GROUP BY RecruitmentSource;
160
161 -- 8. Total absences by departments.
162
163 • use Human Resources;
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

RecruitmentSource	NumEmployees
Indeed	66
LinkedIn	58
CareerBuilder	12
Diversity Job Fair	13
Employee Referral	26
Google Search	19
Website	12
Other	1

Object Info Session Result 7 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
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  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
156 • use Human_Resources;
157 • SELECT RecruitmentSource, COUNT(*) AS NumEmployees
158 FROM EmpDetails
159 GROUP BY RecruitmentSource;
160
161 -- 8. Total absences by departments.
162
163 • use Human_Resources;
164 • SELECT DepartmentName, SUM(Absences) AS TotalAbsences
165 FROM EmpPerformance
166 GROUP BY DepartmentName;
167
168 -- 9. Top Performing Departments.
169
```

Result Grid

	DepartmentName	TotalAbsences
▶	Production	2120
	Software Engineering	96
	Sales	358
	IT/IS	522
	HR	78
	Executive Office	10

Object Info Session Result 8 x

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SCHEMAS

Filter objects

- human\_resources
  - Tables
  - Views
  - Stored Procedures
  - Functions
- human\_resources\_backup
- world

Administration Schemas

Information

No object selected

```
167
168 -- 9. Top Performing Departments.
169
170 -- Removing safe update mode
171
172 • SET SQL_SAFE_UPDATES=0;
173
174 -- Setting ranks for Performance rating
175
176 • UPDATE EmpPerformance
177   SET PerformanceRating =
178     CASE
179       WHEN PerformanceRating = 'Exceeds' THEN 4
180       WHEN PerformanceRating = 'Fully Meets' THEN 3
181       WHEN PerformanceRating = 'Needs Improvement' THEN 2
182       WHEN PerformanceRating = 'PIP' THEN 1
183     ELSE PerformanceRating
184   END;
185
186 -- Finding the top-performing department
187
188 • use Human_Resources;
189 • SELECT DepartmentName, SUM(PerformanceRating) AS TotalPerformance
190   FROM EmpPerformance
191  GROUP BY DepartmentName
192  ORDER BY TotalPerformance DESC
```

Object Info Session

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SCHEMAS

Filter objects

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Administration Schemas

Information

No object selected

```
172 • SET SQL_SAFE_UPDATES=0;
173
174 -- Setting ranks for Performance rating
175
176 • UPDATE EmpPerformance
177 SET PerformanceRating =
178 CASE
179 WHEN PerformanceRating = 'Exceeds' THEN 4
180 WHEN PerformanceRating = 'Fully Meets' THEN 3
181 WHEN PerformanceRating = 'Needs Improvement' THEN 2
182 WHEN PerformanceRating = 'PIP' THEN 1
183 ELSE PerformanceRating
184 END;
185
186 -- Finding the top-performing department
187
188 • use Human_Resources;
189 • SELECT DepartmentName, SUM(PerformanceRating) AS TotalPerformance
190 FROM EmpPerformance
191 GROUP BY DepartmentName
192 ORDER BY TotalPerformance DESC
193 LIMIT 1;
194
195
196 -- 10. Average performance rating.
197
```

Object Info Session

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SCHEMAS

Filter objects

- human\_resources
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  - Views
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- world

Administration Schemas

Information

No object selected

```
181 WHEN PerformanceRating = 'Needs Improvement' THEN 2
182 WHEN PerformanceRating = 'PIP' THEN 1
183 ELSE PerformanceRating
184 END;
185
186 -- Finding the top-performing department
187
188 use Human_Resources;
189 SELECT DepartmentName, SUM(PerformanceRating) AS TotalPerformance
190 FROM EmpPerformance
191 GROUP BY DepartmentName
192 ORDER BY TotalPerformance DESC
193 LIMIT 1;
194
```

Result Grid

DepartmentName	TotalPerformance
Production	623

Object Info Session Result 9 x

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Filter objects

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Administration Schemas

Information

No object selected

```
190 FROM EmpPerformance
191 GROUP BY DepartmentName
192 ORDER BY TotalPerformance DESC
193 LIMIT 1;
194
195
196 -- 10. Average performance rating.
197
198 • use Human_Resources;
199 • SELECT DepartmentName, AVG(PerformanceRating) AS AvgPerformanceRating
200 FROM EmpPerformance
201 GROUP BY DepartmentName
202 ORDER BY AvgPerformanceRating DESC;
203
```

Result Grid | Filter Rows: | Export: | Wrap Cell Content: |

DepartmentName	AvgPerformanceRating
Software Engineering	3.090909090909091
IT/IS	3.06
HR	3
Executive Office	3
Production	2.9808612440191387
Sales	2.774193548387097

Object Info Session Result 10 x

Read Only

Result Grid Form Editor Field Types

Type here to search

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