

Lab 7

SQL- Chapter 7

Using the same database from lab 6 write queries for the following questions.

If you removed the database from your DBMS follow the instructions to create it.

Create a schema with the name of "SpeedyCo". Copy and paste the provided script (Lab6_OnyxCo_MySQL.txt). This will create all the required tables and data.

Speedy company is a software development company. You are hired as a database designer and SQL developer. You have already designed the database for the company and created them. Now you are asked to write some queries for the application. Our database keeps track of the company's projects and the project charges. Each project is assigned to one or more employees and the company charges the customers based on how many hours the assigned employees worked on that specific project. The following figure shows the structure of your design.

Relational diagram

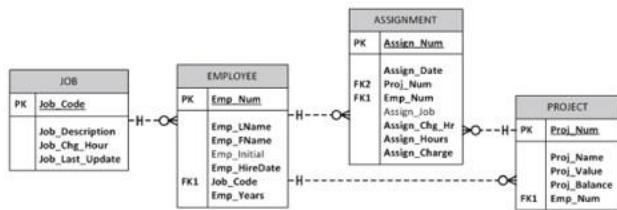


Table name: JOB

JOB_CODE	JOB_DESCRIPTION	JOB_CHG_HOUR	JOB_LAST_UPDATE
500	Programmer	35.75	20-Nov-17
501	Systems Analyst	96.75	20-Nov-17
502	Database Designer	125.00	24-Mar-18
503	Electrical Engineer	84.50	20-Nov-17
504	Mechanical Engineer	67.90	20-Nov-17
505	Civil Engineer	55.78	20-Nov-17
506	Clerical Support	26.87	20-Nov-17
507	DSS Analyst	45.95	20-Nov-17
508	Applications Designer	48.10	24-Mar-18
509	Bio Technician	34.55	20-Nov-17
510	General Support	18.36	20-Nov-17

Table name: PROJECT

PROJ_NUM	PROJ_NAME	PROJ_VALUE	PROJ_BALANCE	EMP_NUM
15	Evergreen	1453500.00	1002350.00	103
18	Amber Wave	3500500.00	2110346.00	108
22	Rolling Tide	805000.00	500345.20	102
25	Startlight	2650500.00	2309880.00	107

Table name: EMPLOYEE

EMP_NUM	EMP_LNAME	EMP_FNAME	EMP_INITIAL	EMP_HIREDATE	JOB_CODE	EMP_YEARS
101	News	John	G	08-Nov-00	502	17
102	Senior	David	H	12-Jul-89	501	28
103	Arbough	June	E	01-Dec-96	500	21
104	Ramoras	Anne	K	15-Nov-87	501	30
105	Johnson	Alice	K	01-Feb-93	502	25
106	Smithfield	vWilliam		22-Jun-04	500	13
107	Alonzo	Maria	D	10-Oct-93	500	24
108	vWashington	Ralph	B	22-Aug-91	501	26
109	Smith	Larry	vV	18-Jul-97	501	20
110	Olenko	Gerald	A	11-Dec-95	505	22
111	vVabash	Geoff	B	04-Apr-91	506	27
112	Smithson	Darlene	M	23-Oct-94	507	23
113	Joenbrood	Delbert	K	15-Nov-96	508	21
114	Jones	Annelise		20-Aug-93	508	24
115	Bawangi	Travis	B	25-Jan-92	501	26
116	Pratt	Gerald	L	05-Mar-97	510	21
117	vWilliamson	Angie	H	19-Jun-96	509	21
118	Frommer	James	J	04-Jan-05	510	13

Table name: ASSIGNMENT

ASSIGN_NUM	ASSIGN_DATE	PROJ_NUM	EMP_NUM	ASSIGN_JOB	ASSIGN_CHG_HR	ASSIGN_HOURS	ASSIGN_CHARGE
1001	22-Mar-18	18	103	503	84.5	3.5	295.75
1002	22-Mar-18	22	117	509	34.55	4.2	145.11
1003	22-Mar-18	18	117	509	34.55	2	69.1
1004	22-Mar-18	18	103	503	84.5	5.9	498.55
1005	22-Mar-18	25	108	501	96.75	2.2	212.85
1006	22-Mar-18	22	104	501	96.75	4.2	406.35
1007	22-Mar-18	25	113	508	50.75	3.8	192.85
1008	22-Mar-18	18	103	503	84.5	0.9	76.05
1009	23-Mar-18	15	115	501	96.75	5.6	541.8
1010	23-Mar-18	15	117	509	34.55	2.4	82.92
1011	23-Mar-18	25	105	502	105	4.3	451.5
1012	23-Mar-18	18	108	501	96.75	3.4	328.95
1013	23-Mar-18	25	115	501	96.75	2	193.5
1014	23-Mar-18	22	104	501	96.75	2.8	270.9
1015	23-Mar-18	15	103	503	84.5	6.1	515.45
1016	23-Mar-18	22	105	502	105	4.7	493.5
1017	23-Mar-18	18	117	509	34.55	3.8	131.29
1018	23-Mar-18	25	117	509	34.55	2.2	76.01
1019	24-Mar-18	25	104	501	110.5	4.9	541.45
1020	24-Mar-18	15	101	502	125	3.1	387.5
1021	24-Mar-18	22	108	501	110.5	2.7	298.35
1022	24-Mar-18	22	115	501	110.5	4.9	541.45
1023	24-Mar-18	22	105	502	125	3.5	437.5
1024	24-Mar-18	15	103	503	84.5	3.3	278.85
1025	24-Mar-18	18	117	509	34.55	4.2	145.11

Write SQL commands to answer the following queries:

You should write the queries in MySQL and run it to see the results. Then for each question you should Copy/Paste the text of the query in a word document, and screen capture of the result table. So, for each question you will have some text (for query) and a picture (for result) in a word document.

1. Write a SQL query to retrieve the project name and the name of its manager for all the projects with a value of 1000000 or less.
2. Write a query that retrieves the employees' number, last name, the total of hours that they work (on any project), and the total income stemming from those hours worked.

3. Write a query to retrieve the first and last name of the employees that are not assigned any projects.
4. Write a query that will yield the employee number, last name, and the total hours that they are assigned (for example: Alice Johnson is assigned 4.3+ 4.7 + 3.5 hours of work)
5. Write a query to retrieve last and first name of the employees that have the most experience for each job title. For example: in the given data, five employees work as Systems Analyst (JOB CODE = 502). Your result table must show just Anne Ramoras's name for this job because she has 17 years of experience.
6. Write a query to show the list of the projects that need more than 10 hours working (Sum of all the employees that work for the project)

After completing all the queries save the document as a PDF file and submit the pdf file.

The queries must be in text format (I will copy paste them in MySQL to run them) . The result of each question should be the result table of MySQL, the queries and results in a different format will not be accepted and you may receive 0.