P0503 - Bluewater Consulting Inc.

Unnormalized

Project ID	Project Name	Employe e ID	Employee Name	Job Title	Billing Rate	Hours Billed
15	Lakevie	103	June Arbough	Lead Programmer	\$85.50	23.8
		101	John News	Database Designer	\$105.00	19.4
		105	Alice Johnson *	Database Designer	\$105.00	35.7
		106	William Smith	Programmer	\$35.75	12.6
		102	David Senior	Systems Analyst	\$96.75	23.8
18	Web App	114	Annelise Jones	Programmer	\$35.75	25.6
		118	James Frommer	General Support	\$18.36	45.3
		104	Anne Ramoras *	Systems Analyst	\$96.75	32.4
		112	Darlene Smithson	DDS Analyst	\$45.95	45
22	Blue Light	105	Alice Johnson	Database Designer	\$105.00	65.7
		104	Anne Ramoras	Systems Analyst	\$96.75	48.4
		113	Jen Clarke	Programmer	\$35.75	23.6
		111	Geoff Wabash	Clerical Support	\$26.87	22
		106	William Smith	Programmer	\$35.75	12.8
25	Power	107	Maria Alonzo	Programmer	\$35.75	25.6

Lite						
	115	Travis Bawangi	Systems Analyst	\$96.75	45.8	
	101	John News *	Database Designer	\$105.00	56.3	
	114	Annelise Jones	Programmer	\$35.75	33.1	
	108	Ralph Washington	Systems Analyst	\$96.75	23.6	
	118	James Frommer	General Support	\$18.36	30.5	
	112	Darlene Smithson	DDS Analyst	\$45.95	41.4	
Note: * indicates project leader						

1NF

project_id	project_n ame	employee _id	employee_name	job_title	billing_rat e	hours_bill ed
15	Lakeview	103	June Arbough	Lead Programmer	\$85.50	23.8
15	Lakeview	101	John News	Database Designer	\$105.00	19.4
15	Lakeview	105	Alice Johnson	Database Designer	\$105.00	35.7
15	Lakeview	106	William Smith	Programmer	\$35.75	12.6
15	Lakeview	102	David Senior	Systems Analyst	\$96.75	23.8
18	Web App	114	Annelise Jones	Programmer	\$35.75	25.6
18	Web App	118	James Frommer	General Support	\$18.36	45.3
18	Web App	104	Anne Ramoras	Systems Analyst	\$96.75	32.4
18	Web App	112	Darlene Smithson	DDS Analyst	\$45.95	45
22	Blue Light	105	Alice Johnson	Database Designer	\$105.00	65.7
22	Blue Light	104	Anne Ramoras	Systems Analyst	\$96.75	48.4
22	Blue Light	113	Jen Clarke	Programmer	\$35.75	23.6

22	Blue Light	111	Geoff Wabash	Clerical Support	\$26.87	22
22	Blue Light	106	William Smith	Programmer	\$35.75	12.8
25	Power Lite	107	Maria Alonzo	Programmer	\$35.75	25.6
25	Power Lite	115	Travis Bawangi	Systems Analyst	\$96.75	45.8
25	Power Lite	101	John News	Database Designer	\$105.00	56.3
25	Power Lite	114	Annelise Jones	Programmer	\$35.75	33.1
25	Power Lite	108	Ralph Washington	Systems Analyst	\$96.75	23.6
25	Power Lite	118	James Frommer	General Support	\$18.36	30.5
25	Power Lite	112	Darlene Smithson	DDS Analyst	\$45.95	41.4

2NF

EMPLOYEE(<u>employee_id,</u>employee_name, job_title, billing_rate)

employee_id	employee_name	job_title	billing_rate
103	June Arbough	Lead Programmer	\$85.50
101	John News	Database Designer	\$105.00
105	Alice Johnson	Database Designer	\$105.00
106	William Smith	Programmer	\$35.75
102	David Senior	Systems Analyst	\$96.75
114	Annelise Jones	Programmer	\$35.75
118	James Frommer	General Support	\$18.36
104	Anne Ramoras	Systems Analyst	\$96.75
112	Darlene Smithson	DDS Analyst	\$45.95
113	Jen Clarke	Programmer	\$35.75
111	Geoff Wabash	Clerical Support	\$26.87
107	Maria Alonzo	Programmer	\$35.75
115	Travis Bawangi	Systems Analyst	\$96.75
108	Ralph Washington	Systems Analyst	\$96.75

PROJECT(<u>project_id,</u> project_name)

project_id	project_name
15	Lakeview
18	Web App
22	Blue Light
25	Power Lite

PROJECT_EMPLOYEE(<u>project_id, employee_id,</u> hours_billed)

project_id	employee_id	hours_billed
15	103	23.8
15	101	19.4
15	105	35.7
15	106	12.6
15	102	23.8
18	114	25.6
18	118	45.3
18	104	32.4
18	112	45
22	105	65.7
22	104	48.4
22	113	23.6
22	111	22
22	106	12.8
25	107	25.6
25	115	45.8
25	101	56.3
25	114	33.1
25	108	23.6
25	118	30.5
25	112	41.4

3NF

JOB(<u>job_id,</u>job_title, billing_rate)

job_id	job_title	billing_rate
201	Lead Programmer	\$85.50
202	Database Designer	\$105.00
203	Programmer	\$35.75
204	Systems Analyst	\$96.75
205	General Support	\$18.36
206	DDS Analyst	\$45.95
207	Clerical Support	\$26.87

EMPLOYEE(<u>employee id,</u> employee_name, *job_id*)

employee id	employee_name	job_id
103	June Arbough	201
101	John News	202
105	Alice Johnson	202
106	William Smith	203
102	David Senior	204
114	Annelise Jones	203
118	James Frommer	205
104	Anne Ramoras	204
112	Darlene Smithson	206
113	Jen Clarke	203
111	Geoff Wabash	207
107	Maria Alonzo	203
115	Travis Bawangi	204
108	Ralph Washington	204

PROJECT(project_id, project_name)

project_id	project_name
15	Lakeview
18	Web App

22	Blue Light
25	Power Lite

PROJECT_EMPLOYEE(project_id, employee_id, hours_billed)

project_id	employee_id	hours_billed
15	103	23.8
15	101	19.4
15	105	35.7
15	106	12.6
15	102	23.8
18	114	25.6
18	118	45.3
18	104	32.4
18	112	45
22	105	65.7
22	104	48.4
22	113	23.6
22	111	22
22	106	12.8
25	107	25.6
25	115	45.8
25	101	56.3
25	114	33.1
25	108	23.6
25	118	30.5
25	112	41.4

