



FACULTAD DE INGENIERÍA

Base de Datos

Tarea 20

Profesor: Ing. Fernando Arreola Franco

Grupo: 01

Alumna: Montes Cantero Zelene Yosseline Isayana.

Semestre 2022-2

Fecha de entrega: 08/Abril/2022



Primer Forma Normal

A	B	C	D	E	F	G
staffNo	name	position	salary	branchNo	branchAddress	telNo
S1500	Tom Daniels	Manager	46000	B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
S0003	Sally Adams	Assistant	30000	B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
S0010	Mary Martinez	Manager	50000	B002	City Center Plaza, Seattle, WA 98122	206-555-6756
S3250	Robert Chin	Supervisor	32000	B002	City Center Plaza, Seattle, WA 98122	206-555-6756
S2250	Sally Stern	Manager	48000	B004	16 – 14th Avenue, Seattle, WA 98128	206-555-3131
S0415	Art Peters	Manager	41000	B003	14 – 8th Avenue, New York, NY 10012	212-371-3000

¿Hay atributos multivaluados? NO

¿Hay atributos de repetición? NO

Cumple con 1FN

Segunda Forma Normal

A B C D E F G

staffNo	name	position	salary	branchNo	branchAddress	telNo
S1500	Tom Daniels	Manager	46000	B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
S0003	Sally Adams	Assistant	30000	B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
S0010	Mary Martinez	Manager	50000	B002	City Center Plaza, Seattle, WA 98122	206-555-6756
S3250	Robert Chin	Supervisor	32000	B002	City Center Plaza, Seattle, WA 98122	206-555-6756
S2250	Sally Stern	Manager	48000	B004	16 – 14th Avenue, Seattle, WA 98128	206-555-3131
S0415	Art Peters	Manager	41000	B003	14 – 8th Avenue, New York, NY 10012	212-371-3000

¿Se encuentra en 1FN? SI
 ¿La PK es simple? NO
 Analizamos dependencias parciales
 ¿Hay dependencias parciales? SI
NO Cumple con 2FN

PK :{A, E}
 A,E -> B,C,D,F,G
A -> B,C,D
E -> F,G
A,E -> {}

A B C D

staffNo	name	position	salary
S1500	Tom Daniels	Manager	46000
S0003	Sally Adams	Assistant	30000
S0010	Mary Martinez	Manager	50000
S3250	Robert Chin	Supervisor	32000
S2250	Sally Stern	Manager	48000
S0415	Art Peters	Manager	41000

E F G

branchNo	branchAddress	telNo
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
B002	City Center Plaza, Seattle, WA 98122	206-555-6756
B002	City Center Plaza, Seattle, WA 98122	206-555-6756
B004	16 – 14th Avenue, Seattle, WA 98128	206-555-3131
B003	14 – 8th Avenue, New York, NY 10012	212-371-3000

A E

staffNo	branchNo
S1500	B001
S0003	B001
S0010	B002
S3250	B002
S2250	B004
S0415	B003

¿Hay dependencias parciales? NO
Cumple con 2FN

Tercer Forma Normal

PK : {A, E}
 A, E → B, C, D, F, G
A → B, C, D
E → F, G
 A, E → {}

¿Se encuentra en 1FN? SI
 ¿Se encuentra en 2FN? SI
 ¿Hay transitividad entre atributos no parciales?
 No hay transitividad
Cumple con 3 FN

A	B	C	D
staffNo	name	position	salary
S1500	Tom Daniels	Manager	46000
S0003	Sally Adams	Assistant	30000
S0010	Mary Martinez	Manager	50000
S3250	Robert Chin	Supervisor	32000
S2250	Sally Stern	Manager	48000
S0415	Art Peters	Manager	41000

E	F	G
branchNo	branchAddress	telNo
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
B002	City Center Plaza, Seattle, WA 98122	206-555-6756
B002	City Center Plaza, Seattle, WA 98122	206-555-6756
B004	16 – 14th Avenue, Seattle, WA 98128	206-555-3131
B003	14 – 8th Avenue, New York, NY 10012	212-371-3000

A	E
staffNo	branchNo
S1500	B001
S0003	B001
S0010	B002
S3250	B002
S2250	B004
S0415	B003