

Aplicar 3FN a tomando como PK = A:

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

PK : A

¿Cumple 1FN?

- ¿Grupo de Repetición?: No
- ¿Valores Atómicos en columnas?: Si

∴ **Cumple con 1FN**

¿Cumple 2FN?

- 1FN ✔
- Dependencias Funcionales:

PK : A → {B,C,D,E,F,G}

A → {B,C,D,E}

E → {F,G}

Como la PK es simple ∴ **Cumple con 2FN**

¿Cumple 3FN?

- 2FN ✔

- ¿Hay transitividad entre atributos no principales?: Si

∴ No Cumple con 3FN

Dependencias Transitivas:

PK = A

$A \rightarrow \{B, C, D, E, F, G\}$

$A \rightarrow \{B, C, D, E\}$

$E \rightarrow \{F, G\}$

Obteniendo 3FN

PK				FK
staffNo	name	position	salary	branchNo
S1500	Tom Daniels	Manager	46000	B001
S0003	Sally Adams	Assistant	30000	B001
S0010	Mary Martínez	Manager	50000	B002
S3250	Robert Chin	Supervisor	32000	B002
S2250	Sally Stern	Manager	48000	B004
S0415	Art Peters	Manager	41000	B003

PK		
branchNo	branchAddress	telNo
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
B002	City Center Plaza, Seattle, WA 98122	206-555-6756
B003	14-8th Avenue, New York, NY 10012	212-371-3000
B004	16-14th Avenue, Seattle, WA98128	206-555-3131

Tomando PK = A,E

- Cumple 1FN
- No Cumple 2FN ya que:

PK = {A,E}
 $\{A, E\} \rightarrow \{B, C, D, F, G\}$
 $A \rightarrow \{B, C, D, \}$
 $E \rightarrow \{F, G\}$
 $\{A, E\} \rightarrow \{ \}$

Resultando en:

PK

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

PK

branchNo	branchAddress	telNo
B001	8 Jefferson Way, Portland, OR 97201	503-555-3618
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B003	14-8th Avenue, New York, NY 10012	212-371-3000
B004	16-14th Avenue, Seattle, WA98128	206-555-3131

FK PK

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

- Cumple 3FN