

Frank Siderio

Lab 7

1. I think that it could be organized better and that it definitely needs a little work to get into 3rd normal form. I think that it eventually has to be separated into multiple tables. That way it is organized and structured correctly and in 3rd normal form.

2.

	packageid character(4)	tagnumber character(5)	installdate text	softwarecostusd numeric(5,2)
1	AC01	32808	09-13-2005	754.95
2	D832	32808	12-03-2005	380.00
3	D832	37691	06-15-2005	380.00
4	D833	57772	05-27-2005	412.77
5	WP08	32808	01-12-2006	185.00
6	WP08	37691	06-15-2005	227.50
7	WP08	57222	05-27-2005	170.24
8	WP09	59836	10-30-2005	35.00
9	WP09	77740	05-27-2005	35.00

3. The primary key is a composite key made up of packageID and TagNumber.

4.

	packageid character(4)	tagnumber character(5)	installdate text	softwarecostusd numeric(5,2)	packagename text	computermodel text
1	AC01	32808	09-13-2005	754.95	Zork	Dell
2	D832	32808	12-03-2005	380.00	Zork	Apple
3	D832	37691	06-15-2005	380.00	Portal	Apple
4	D833	57772	05-27-2005	412.77	Alan	IBM
5	WP08	32808	01-12-2006	185.00	Zork	Google
6	WP08	37691	06-15-2005	227.50	Portal	Google
7	WP08	57222	05-27-2005	170.24	Alan	Google
8	WP09	59836	10-30-2005	35.00	Frank	Samsung
9	WP09	77740	05-27-2005	35.00	Bond	Samsung

5. Functional Dependencies

(packageID, TagNumber) → installDate, SoftwareCostUSD

TagNumber → packageName

packageID → computerModel

6. The table isn't in 3rd normal form because there are multiple key dependencies

7. Orders Table - (Package ID and Tag Number)

Package Name Table - Tag Number

Computer Model Table - Package ID

8. Orders Table: (packageID, TagNumber) → installDate, SoftwareCostUSD
Package Name Table: TagNumber → packageName
Computer Model Table: packageID → computerModel

9. Each table non key attributes are dependent on the key and nothing but the key.

10.

