

11/6/2017

- 1) The data is not formatted but it should not be an issue since that is in the next upcoming step. So it should be easier to maintain in the future. Also with the amount of data you have received for your company, it shows that you have commitment.

- 2)

First Normal Form			
PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-2005	380.00
DB32	37691	06-15-2005	380.00
DB33	57772	05-27-2005	412.77
WP08	32802	01-12-2006	185.00
WP08	37691	06-15-2005	227.50
WP08	57222	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

- 3) The Primary key in the table is the composite key that was created when you combine the data values in PackageID and TagNumber.

- 4)

New Table					
PackageID	TagNumber	ComputerBrand	PackageName	InstallDate	SoftwareCostUSD
AC01	32808	Alienware	Dying Light	09-13-2005	754.95
DB32	32808	Alienware	Dead By Daylight	12-03-2005	380.00
DB32	37691	MSI	Dead By Daylight	06-15-2005	380.00
DB33	57772	Apple	Halo	05-27-2005	412.77
WP08	32808	Dell	Call of Duty	01-12-2006	185.00
WP08	37691	MSI	Call of Duty	06-15-2005	227.50
WP08	57222	Lenovo	Call of Duty	05-27-2005	170.24
WP09	59836	IBM	Destiny	10-30-2005	35.00
WP09	77740	HP	Destiny	05-27-2005	35.00

- 5) PackageID → PackageName

TagNumber → ComputerBrand

PackageID and TagNumber → InstallDate and SoftwareCostUSD

- 6) Tables are only third normal form if all of the attributes in the given table are determined by the candidate key and it also has to be in second normal form. The table is not in second normal form. So right away it cannot be in third normal form.

- 7) Device Table Primary Key → TagNumber

Installation Table Primary Key → PackageID, TagNumber

Software Table Primary Key \rightarrow PackageID

8) Device Table: TagNumber \rightarrow ComputerBrand

Installation Table: PackageID, TagNumber \rightarrow InstallDate, SoftwareCostUSD

Software Table: PackageID \rightarrow PackageName

9) These tables are in third normal form because it decreases the chance of duplicate data.
Duplicate data is a cardinal sin so we cannot have that in our tables.

10)

