

Part One:

1. Thank you for the opportunity at Tycho Manufacturing, the data you have so far looks great however, there are some improvements that can be made. The data in the table should be isolated and put into 1NF.

2.

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	32808	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. PackageID and InstallDate are the primary key

Part Two:

4.

PackageID	TagNumber	InstallDate	SoftwareCostUSD	SoftwarePackageName	ComputerModel
AC01	32808	09-13-2005	754.95	Zork	IBM
DB32	32808	12-03-2005	380.00	Portal	IBM
DB32	37691	06-15-2005	380.00	Portal	ACER
DB33	57772	05-27-2005	412.77	FireFox	Gateway
WP08	32808	01-12-2006	185.00	Linux	IBM
WP08	37691	06-15-2005	227.50	Linux	ACER
WP08	57222	05-27-2005	170.24	Linux	Dell
WP09	59836	10-30-2005	35.00	Windows	IBM
WP09	77740	05-27-2005	35.00	Windows	Apple

5. PackageID – SoftwarePackageName

ComputerModel - TagNumber

SoftwareCostUSD - PackageID, TagNumber, InstallDate

6. The new table is not in 3NF because it does not satisfy the requirements of 2NF. 2NF requires no partial key dependencies.

Part Three:

7. Primary Key: Package ID

PackageID	SoftwarePackageName
AC01	Zork
DB32	Portal
DB33	FireFox
WP08	Linux
WP09	Windows

Primary Key: TagNumber

TagNumber	ComputerModel
32808	IBM
37691	ACER
57772	Gateway
57222	Dell
77740	Apple

Primary Key: PackageID, TagNumber, InstallDate

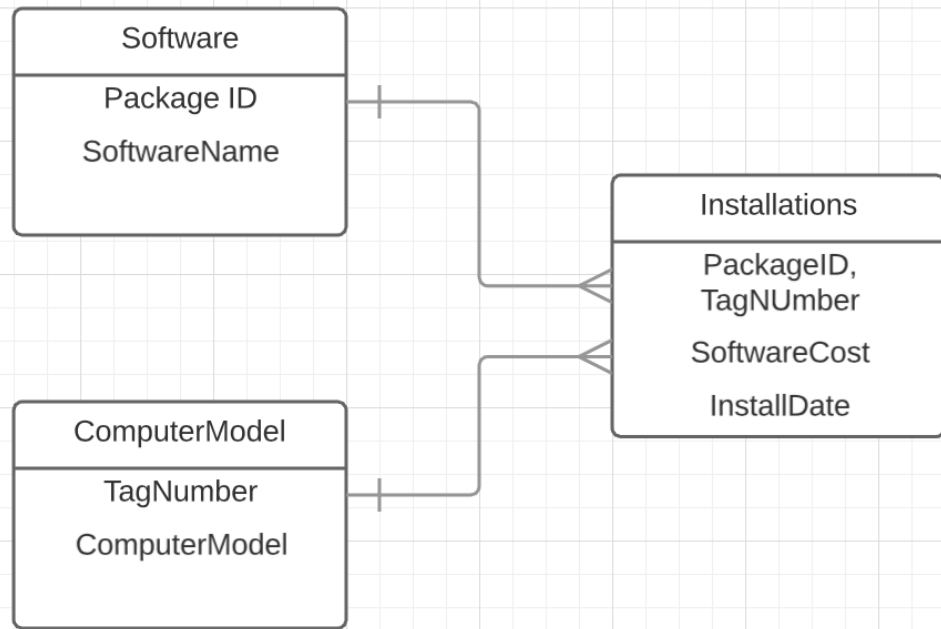
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AC01	32808	09-13-2005	754.95
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WP09	77740	05-27-2005	35.00

8. PackageID – SoftwarePackageName

ComputerModel - TagNumber

SoftwareCostUSD - PackageID, TagNumber, InstallDate

9. The new tables are in 3NF they satisfy for the requirements of both 1NF and 2NF. The table doesn't have multi-key dependences.



10.