

PART 1

1. It's a good start, but it needs work. It's going to take some work to get it into 3NF/BCNF, which will be necessary to get this database to be as efficient as possible.
- 2.

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

3. Combining PackageID and TagNumber (to form a composite key) would make up the primary key for this table.

PART 2

4.

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

5. PackageID → SoftwarePackageName
TagNumber → ComputerModel
(PackageID, TagNumber) → SoftwareCostUSD
(PackageID, TagNumber) → InstallDate
6. This table isn't in 3NF because it has a few key dependencies.

PART 3

Software

PackageID	SoftwarePackageName
AC01	Zork
DB32	Portal
DB33	Bulletstorm
WP08	FNaF
WP09	Call of Duty

Hardware

TagNumber	ComputerModel
32808	IBM
37691	Apple
57772	eMachines
57222	Gateway
59836	Dell
77740	Lenovo

Orders

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

7. Software: PackageID
Hardware: TagNumber
Orders: (PackageID, TagNumber)
8. Software: PackageID → SoftwarePackageName
Hardware: TagNumber → ComputerModel
Orders: (PackageID, TagNumber) → SoftwareCostUSD
(PackageID, TagNumber) → InstallDate
9. All non-key attributes are only dependent on the key.
- 10.

