

Eric Schmidt

Part One

- 1) You would never insult a CEO, especially one that just hired you. In this scenario you would thank him for personally collecting this information and you will be diligent into putting this information into an even faster system. NEVER TELL AN EMPLOYER THEY ARE WRONG, this will lead to no money.
- 2)

Tycho Package Sale Information

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	9/13/2005	754.95
DB32	32808	12/3/2005	380
DB32	37691	6/15/2005	380
DB33	57772	5/27/2005	412.77
WP08	32808	1/12/2006	185
WP08	37691	6/15/2005	227.5
WP08	57222	5/27/2005	170.24
WP09	59836	10/30/2005	35
WP09	77740	5/27/2005	35

- 3)The primary key for this first normal form table would be a composite key (PackageID, TagNumber)

Part Two

- 1)

Tycho Package Sale Information					
PackageID	TagNumber	InstallDate	SoftwareCostUSD	PackageName	ComputerModel
AC01	32808	9/13/2005	754.95	Microsoft Access	Dell
DB32	32808	12/3/2005	380	Lotus Notes	Dell
DB32	37691	6/15/2005	380	Lotus Notes	ASUS
DB33	57772	5/27/2005	412.77	Microsoft Bob	HP
WP08	32808	1/12/2006	185	Ask Toolbar	Dell
WP08	37691	6/15/2005	227.5	Ask Toolbar	ASUS
WP08	57222	5/27/2005	170.24	Ask Toolbar	HP
WP09	59836	10/30/2005	35	Norton "Anti"Virus	Lenovo
WP09	77740	5/27/2005	35	Norton "Anti"Virus	Apple

2)Dependencies:

PackageID -> PackageName

TagNumber -> ComputerModel

CompositeKEY PackageID, TagNumber -> InstallDate, SoftwareCostUSD

3)This is not in 3rd normal form because there is duplication in data information. There is also not referential integrity in this 1st normal form table.

Part Three

1)

PackageID	PackageName
AC01	Microsoft Access
DB32	Lotus Notes
DB33	Microsoft Bob
WP08	Ask Toolbar
WP09	Norton "Anti"Virus

Tag Number	ComputerModel
32808	Dell
37691	ASUS
57772	HP
59836	Lenovo
77740	Apple

Installation			
PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	9/13/2005	754.95
DB32	32808	12/3/2005	380
DB32	37691	6/15/2005	380
DB33	57772	5/27/2005	412.77
WP08	32808	1/12/2006	185
WP08	37691	6/15/2005	227.5
WP08	57222	5/27/2005	170.24
WP09	59836	10/30/2005	35
WP09	77740	5/27/2005	35

2) PackageID -> PackageName

TagNumber -> ComputerModel

PackageID, TagNumber -> InstallDate, SoftwareCostUSD

3) These new tables are in third normal form because they are:

All single value data in each column; First normal form

Every non-key attribute is fully functionally dependent on the primary key; Second normal form

Only foreign keys are referencing other tables; third normal form

4)

