

Nicholas Carmello  
Dr. Labouseur

1) I would say that this table has inconsistent data. There are 2 missing wp08 packages and one db32 package is missing a label.

2)

PackageID	TagNumber	InstallDate	SoftwareUSd
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) The primary key is the package ID and the tag number. It is a composite key.

## Part Two

PackageID	TagNumber	InstallDate	SoftwareUSd	Model	SoftName
AC01	32808	09-13-2005	754.95	Apple	Cod2
DB32	32808	12-03-2005	380.00	Apple	Zork
DB32	37691	06-15-2005	380.00	Lenovo	Zork
DB33	57772	05-27-2005	412.77	Microsoft	Portal
WP08	32808	01-12-2006	185.00	Apple	WOW
WP08	37691	06-15-2005	227.50	Lenovo	WOW2
WP08	57222	05-27-2005	170.24	Microsoft	Cod
WP09	59836	10-30-2005	35.00	Hp	Runescape
WP09	77740	05-27-2005	35.00	IBM	Runescape

5) PackageID,tag number → installdate, softwareusd, softname,model

6) This table isn't in 3rd normalization form because the table isn't in second normalization form and software used is dependent on the softname.

## Part Three

7) Packageid, tagNumber, {packageid,tagnumber}

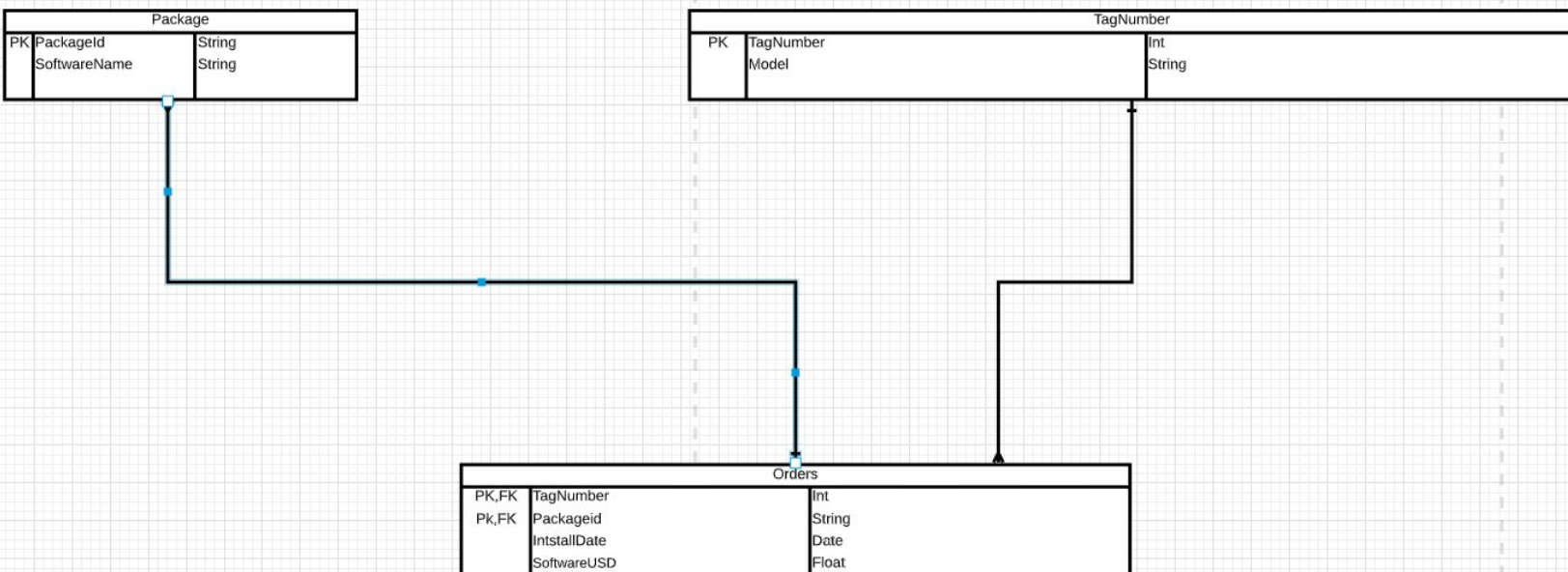
8) Packageid → softname

TagNumber → model

Packageid, tagnumber → installdate, softwareusd

9) These tables are in third normal form because they are in second normal form and none of the non-key attributes are dependent on other non-key attributes.

10)



Packageld	SoftwareName
AC01	Cod2
DB32	Zork
DB32	Zork
DB33	Portal
WP08	WOW
WP08	WOW
WP08	WOW
WP09	Runescape
WP09	Runescape

Packageld	TagNumber	InstallDate	SoftwareUSD
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
08	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

TagNumber	Model
32808	Apple
32808	Apple
37691	Lenovo
57772	Microsoft
32808	Apple
37691	Lenovo
57222	Microsoft
59836	Hp
77740	IBM