

## Lab 7

Anders Lykkehoy

1. I would reply that it seems like a good starting point, and I should be able to work with it.
- 2.

PackageID	TagNumber	InstallDate	SoftwareCostUSD
AC01	32808	09-13-2005	754.95
DB32	32808	12-03-0205	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	57772	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

3. The primary key is PackageID, TagNumber.
- 4.

PackageID	PackageName	TagNumber	ComputerModel	InstallDate	SoftwareCostUSD
AC01	Zork	32808	IBM	09-13-2005	754.95
DB32	Portal	32808	IBM	12-03-0205	380.00
DB32	Portal	37691	Apple	06-15-2005	380.00
DB33	Kobayashi Maru	57772	HP	05-27-2005	412.77
WP08	Polybius	32808	IBM	01-12-2006	185.00
WP08	Polybius	37691	Apple	06-15-2005	227.50
WP08	Polybius	57772	HP	05-27-2005	170.24
WP09	Half Life Ep 3	59836	Acer	10-30-2005	35.00
WP09	Half Life Ep 3	77740	Dell	05-27-2005	35.00

5. Functional Dependencies:
  - a. PackageName depends on PackageID
  - b. ComputerModel depends on TagNumber
  - c. SoftwareCostUSD and InstallDate depends on PackageID and TagNumber
6. Not in 3rd normal form because there are columns that are functionally dependant on partial keys.
7. Install Info: Primary key is PackageID, TagNumber

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

Computers: Primary Key is TagNumber

TagNumber	ComputerModel
32808	IBM
37691	Apple
57772	HP
59836	Acer
77740	Dell

Software: Primary key is PackageID

PackageID	PackageName
AC01	Zork
DB32	Portal
DB33	Kobayashi Maru
WP08	Polybius
WP09	Half Life Ep 3

8. Functional Dependencies:

a. Install Info:

i. InstallDate and SoftwareCostUSD depend on PackageID and TagNumber

b. Computers:

i. ComputerModel depends on TagNumber

c. Software:

i. PackageName depends on PackageID

9. Our new tables are in 3rd normal form because all columns in a table are solely dependent on the entire primary key.

10. ER Diagram:

