Alex Stigliano

Professor Sean Daneshvar

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# <u>Lab #7 Normalization 1</u>

# Part 1

1.) I would reply by thanking him for the data in the table that he provided and assure him that I would do the best I can to normalize the data and make it easier to track the software packages installed on their station computers.

# 2.)

PackageID	TagNumber	InstallDate	SoftwareCostUSD
ACO1	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	57772	05-27-2005	170.24
WP09	59836	10-30-2005	35.00
WP09	77740	05-27-2005	35.00

3.) The primary key of the table is both: TagNumber and PackageID.

# Part 2

4.)

PackageID	TagNumber	InstallDate	SoftwareCostUSD	SoftwareName	ModelName
ACO1	32808	09-13-2005	754.95	Portal	IBM
DB32	32808	12-03-2005	380.00	Zork	IBM
DB32	37691	06-15-2005	380.00	Minecraft	IBM
DB33	57772	05-27-2005	412.77	Poker Night	Apple
				At Inventory	
WP08	32808	01-12-2006	185.00	Minesweeper	Apple
WP08	37691	06-15-2005	227.50	Solitaire	IBM
WP08	57772	05-27-2005	170.24	Portal 2	Apple
WP09	59836	10-30-2005	35.00	Left 4 Dead	IBM
WP09	77740	05-27-2005	35.00	Left 4 Dead 2	IBM

- 5.) The functional dependencies are: ModelName is fully dependent on the TagNumber,
  InstallDate and the SoftwareCostUSD is determined by the TagName and the PackID.
- 6.) This new table is not in the third form because it is not in the second form.

# Part 3

- 7.) The primary keys are: PackageID, TagNumber.
- 8.) PackName depends on PackID, ModelName depends on TagNumber, and InstDate and SoftwareCostUSD both depend on PackID and TagNUmber.

9.) The tables are in third form because it's in second form and there are only non-transitive						
dependencies on the primary key of the tables.						