Jason Wong
Lab 7
3/28/2014

Part One

1. "I think this was a great system for keeping track of the software using a spreadsheet, but in order to create a database to replace it, I'm going to have to change the structure a bit."

2.

PackID	TagNum	InstallDate	SoftwareCost
AC01	32808	09-13-1995	754.95
DB32	32808	12-03-1995	380.00
DB32	37691	06-15-1995	380.00
DB33	57772	05-27-1995	412.77
WP08	32808	01-12-1996	185.00
WP08	37691	06-15-1995	227.50
WP08	57222	05-27-1995	170.24
WP09	59836	10-30-1995	35.00
WP09	77740	05-27-1995	35.00

3. PackID

Part Two

4.

PackID	TagNum	InstallDate	SoftwareCost	PackName	Model
AC01	32808	09-13-1995	754.95	Zork	HP
DB32	32808	12-03-1995	380.00	Portal	HP
DB32	37691	06-15-1995	380.00	Portal	Apple
DB33	57772	05-27-1995	412.77	Minecraft	Lenovo
WP08	32808	01-12-1996	185.00	FTL	HP
WP08	37691	06-15-1995	227.50	FTL	Apple
WP08	57222	05-27-1995	170.24	FTL	Lenovo
WP09	59836	10-30-1995	35.00	Skyrim	Dell
WP09	77740	05-27-1995	35.00	Skyrim	Dell

5. SoftwareCost depends on PackID, PackName depends on PackID, Model depends on TagNum

6. There are update anomalies – changing a PackName for instance requires changing in every place it appears in the table

Part Three

7. Machine: MachineID, Pack: PackID, Installation: {MachineID, PackID}

8. machine.model and machine.tagnum depend on machine.machineid, pack.name and pack.cost depend on pack.packid. installation.installdate depends on installation.machineid and installation.packid

9. There are no insert, update, or delete anomolies – data only needs to be modified in one place for each of the opersations

10.

Machine	Installation	Pack
machineid	machineid	packid
tagnum	packid	name
model	installdate	cost