Dustin Paltz

4/28/2015

CS 514 – Lab 5 Part 1

6) Consider the relation and the FD's

sticky(w, i, c, k, e, t, s)

w 🡪 i, c, k  
k 🡪 e  
s 🡪 t  
c 🡪 s

1. Identify candidate keys  
     
   {w} {w, s}
2. Identify 2NF violations, if any, and correct them  
     
   s 🡪 t  
     
   sticky( w, i, c, k, e, s )  
   tricky( s, t )

7) Consider the relation and the FD's

duck(m, i, g, r, a, t, e, s)

m, t 🡪 a, i, r, s

i 🡪 g

i 🡪 e

t 🡪 a

s 🡪 m

1. Identify ALL candidate keys  
     
   {m, t} {s, t}
2. Identify all prime attributes  
     
   {m, s, t}
3. State the 'highest' normal form this table is currently in  
     
   1NF
4. Modify the table, in steps, until it is in BCNF  
     
   2NF Violations  
   t 🡪 a  
     
   duck(m, i, g, r, t, e, s)  
   muck(t, a)  
     
   3NF Violations  
   i 🡪 e, g  
     
   duck(m, i, r, t, s)  
   muck(t, a)  
   buck(i, e, g)  
     
   BCNF Violations  
   s 🡪 m  
     
   duck(i, r, t, s)  
   muck(t, a)  
   buck(i, e, g)  
   tuck(s, m)