Dustin Paltz

1. Consider the relation and 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 )
2. Consider the relation and 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 🡪 g  
      i 🡪 e

2NF violation

* Subset of a CK 🡪 non-prime/s

3NF

* Violation: non-prime 🡪 non-prime
* Compliance: LHS is CK or RHS is prime

BCNF compliance

* LHS is CK