**CMSC/CIS 255 Fall 2016**

**Homework 7 Self-Check**

**DUE: Midnight TUE Oct 18**

Complete the following by comparing the HW7 document you handed in with the HW7 Solution document posted on Scholar. Upload to HW7 Hand-in.

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| **61** | **Y (Yes), NS (Not Sure) or N (No)** |
| 1. Six boxes, as shown in solution. Order is irrelevant. | Y |
| Arrows above the boxes from EMP\_NUM to each other box. | Y |
| Arrow **below** the boxes from DEPT\_CODE to DEPT\_NAME. | Y |
| No other arrows (other dependencies involve candidate keys). | Y |
| Table IS in 2NF because there are no partial dependencies. | Y |
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| 1. Two dependency diagrams. |  |
| 1. First diagram: Five boxes, DEPT\_CODE should be included but DEPT\_NAME removed. | N |
| Arrows above the boxes from EMP\_NUM to each other box. | Y |
| EMP\_NUM is PK. | Y |
| DEPT\_CODE is FK. | Y |
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| 1. Second diagram: 2 boxes, DEPT\_CODE and DEPT\_NAME. | Y |
| Arrow above the boxes from DEPT\_CODE to DEPT\_NAME. | Y |
| DEPT\_CODE is PK. | Y |

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| **62** | **Y (Yes), NS (Not Sure) or N (No)** |
| 1. PK is (INV\_NUM, PROD\_NUM). | Y |
| Eight boxes, as shown in solution. Order is irrelevant. | Y |
| Arrows above the boxes from (INV\_NUM, PROD\_NUM) to each other box. | Y |
| Arrow **below** the boxes from INV\_NUM to SALE\_DATE. | Y |
| Arrows **below** the boxes from PROD\_NUM to PROD\_DESCRIPTION,  VEND\_CODE, VEND\_NAME and PROD\_PRICE. | Y |
| Arrow **below** the boxes from VEND\_CODE to VEND\_NAME. | Y |
| No other arrows. |  |
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| 1. Three dependency diagrams, in no particular order. | Y |
| 1. First diagram: 3 boxes, INV\_NUM, PROD\_NUM, NUM\_SOLD. | N |
| Arrows above the boxes from (INV\_NUM, PROD\_NUM) to NUM\_SOLD. |  |
| PK is (INV\_NUM, PROD\_NUM). |  |
| INV\_NUM is FK. |  |
| PROD\_NUM is FK. |  |
|  |  |
| 1. Second diagram: 2 boxes, INV\_NUM and SALE\_DATE. | Y |
| Arrow above the boxes from INV\_NUM to SALE\_DATE. |  |
| INV\_NUM is PK. |  |
|  |  |
| 1. Third diagram: 5 boxes, PROD\_NUM, PROD\_DESCRIPTION, VEND\_CODE, VEND\_NAME and PROD\_PRICE. | N |
| Arrows above the boxes from PROD\_NUM to PROD\_DESCRIPTION,  VEND\_CODE, VEND\_NAME and PROD\_PRICE. |  |
| Arrow **below** the boxes from VEND\_CODE to VEND\_NAME. |  |
| PROD\_NUM is PK. |  |
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| 1. FOUR dependency diagrams, in no particular order. | Y |
| 1. First diagram: Same as in part (b). | N |
| 1. Second diagram: Same as in part (b). | N |
|  |  |
| 1. Third diagram: 4 boxes (VEND\_NAME removed from (b)):   PROD\_NUM, PROD\_DESCRIPTION, VEND\_CODE, PROD\_PRICE. | N |
| Arrows above the boxes from PROD\_NUM to PROD\_DESCRIPTION,  VEND\_CODE, and PROD\_PRICE. | N |
| PROD\_NUM is PK. | Y |
| VEND\_CODE is FK. | Y |
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| 1. Fourth diagaram: 2 boxes, VEND\_CODE and VEND\_NAME. | Y |
| Arrow above the boxes from VEND\_CODE to VEND\_NAME. | Y |
| VEND\_CODE is PK. | Y |

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| **63** | **Y (Yes), NS (Not Sure) or N (No)** |
| 1. The dependency diagram should have 12 boxes, in no particular order. | N |
| PK is Appointment\_Number. | Y |
| Arrows above the boxes from Appointment\_Number to every other attribute. | Y |
| Arrows **below** the boxes from PatientID to Patient\_Name, Patient\_Street,  Patient\_City, Patient\_State, Patient\_Zip. | Y |
| Arrows **below** the boxes from Patient\_Zip to Patient\_City and Patient\_State. | N |
| Arrow **below** the boxes from Patient\_City to Patient\_State. | N |
| Arrows **below** the boxes from Doctor\_ID to Doctor\_Name and Doctor\_Phone | Y |
|  |  |
| 1. FOUR dependency diagrams, in no particular order. | N |
| 1. First diagram: 5 boxes: Appointment\_Number, Appointment\_Date,   Appointment\_Time, Patient\_ID, Doctor\_ID. | N |
| Arrows above the boxes from Appointment\_Number to every other attribute. | Y |
| Appointment\_Number is PK. | Y |
| Patient\_ID and Doctor\_ID are FKs. | N |
|  | Y |
| 1. Second diagram: 3 boxes: Doctor\_ID, Doctor\_Name, Doctor\_Phone. | Y |
| Arrows above the boxes from Doctor\_ID to the other 2 attributes. | Y |
| Doctor\_ID is PK. |  |
|  |  |
| 1. Third diagram: 4 boxes, Patient\_ID, Patient\_Name, Patient\_Street,   Patient\_Zip. | Y |
| Arrows above the boxes from Patient\_ID to every other attribute. | Y |
| Patient\_ID is PK. | Y |
| Patient\_Zip is FK. | N |
|  |  |
| 1. Fourth diagaram: 3 boxes, Patient\_Zip, Patient \_City, Patient \_State. | N |
| Arrows above the boxes from Patient\_Zip to the other 2 attributes. | N |
| Patient\_Zip is PK. | N |

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| **64** | **Y (Yes), NS (Not Sure) or N (No)** |
| 1. Three dependency diagrams, in no particular order. | Y |
| 1. First diagram: A determines D. | Y |
| 1. Second diagram: E determines G. | Y |
| 1. Third diagram: A and B determine C, E, F (above the boxes) | Y |
| C determines B (below the boxes). |  |
|  |  |
| 1. Correct explanation. | Y |
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| 1. Four dependency diagrams, in no particular order. | Y |
| 1. First diagram: as in part (a) | Y |
| 1. Second diagram: as in part (a) | Y |
| 1. Third diagram: **C determines B**. | Y |
| 1. Fourth diagaram: **A and C** determine E, F. | Y |

**I will grade 65.**

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| **66** | **Y (Yes), NS (Not Sure) or N (No)** |
| 1. Output matches (order of rows could be different). | N |
| Query is the same or similar to one of the 2 solutions. | N |
|  |  |
| 1. Output matches. | N |
| Query is the same or similar. | N |
| TOP (1) WITH TIES is used. | N |
|  |  |
| 1. Output matches (order of rows could be different). | N |
| All columns are named. | N |
| The “Season” column is generated without using 12 separate conditions. | N |