

## FDT Assignment 2

*When giving definitions, state them in your own words. Do not copy from the lecture notes or the Hub. Definitions which are close to identical to those from lecture notes will not receive full marks.*

1. State what it means for two attributes A and B to be functionally dependent (i.e. B depends on A, or equivalently  $A \rightarrow B$ ).
2. Define a candidate key.
3. Define a primary key.
4. In your own words, give definitions of first normal form, second normal form, and third normal form.

*By “describe a table”, we mean name the table, then name and describe its attributes. It is not necessary to specify data types.*

5. Describe a table which is not in first normal form, and explain why. Then state what modifications you would have to make to put this table in first normal form.
6. Describe a table which is in first normal form, but not in second normal form, and explain why. Then state what modifications you would have to make to put this table in second normal form.
7. Describe a table which is in second normal form, but not in third normal form, and explain why. Then state what modifications you would have to make to put this table in third normal form.