

Q1

- a) $B^+ = BDE$
- b) $CF^+ = ABCDEF$
- c) $DF^+ = ADEF$
- d) $BC^+ = BCDE$
- e) $ABC^+ = ABCDE$

Q2

- a): No, since A not in B closure
- b): Yes, since E in CF closure
- c): No, since B not in DF closure
- d): No, since BD closure = BDE, C not in BD closure
- e): Yes, since BFC closure = ABCDEF, A in BFC closure

Q3

A closure ADCE $A \rightarrow D$
B closure ABCDE $B \rightarrow AD$
C closure ADCE $D \rightarrow A$
AD closure ADCE trivial
Project to ABD: $A \rightarrow D$, $B \rightarrow AD$, $D \rightarrow A$

Q4

A	B	C	D	E	F
1	1	1	1	1	1
2	1	2	1	1	1

Redundancy are highlighted

Since $B \rightarrow EF$, then know E,F

Since $F \rightarrow D$, then know D