# Task C4.2.1

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| **Dependency** | **Possible(Yes/No)** | **Why/why not?** |
| **A -> B** | NO | As there is same value of **B** **(b2)** for different values of **A (a1, a2).** |
| **A -> C** | NO | As there is same value of **C (c3)** for different values of **A (a1, a2).** |
| **A -> D** | NO | As there is same value of **D (d4)** for different values of **A (a2, a3)**. |
| **B -> A** | NO | As there is same value of **A (a1)** for different values of **B (b1, b2)**. |
| **B -> C** | YES | As each element of **C** can be uniquely identifiable by unique element of **B**. |
| **B -> D** | NO | As there is same value of **D (d4)** for different values of **B (b2, b3)**. |
| **C -> A** | NO | As there is same value of **A (a1)** for different values of **C (c1, c3)**. |
| **C -> B** | YES | As each element of **B** can be uniquely identifiable by unique element of **C**. |
| **C -> D** | NO | As there is same value of **D (d4)** for different values of **C (c3, c5)**. |
| **{A, B} -> C** | YES | As each element of **C** can be uniquely identifiable by unique element of **{A, B}**. |
| **{A, B} -> D** | YES | As each element of **D** can be uniquely identifiable by unique element of **{A, B}**. |
| **{B, C} -> A** | NO | As there is same value of **A (a1)** for different values of **{B, C}({b1, c1}, {b2, c3})**. |
| **{B, C} -> D** | NO | As there is same value of **D (d4)** for different values of **{B, C}({b2,c3}, {b3,c5})**. |
| **{C, D} -> A** | YES | As each element of **A** can be uniquely identifiable by unique element of **{C, D}**. |
| **{C, D} -> B** | YES | As each element of **B** can be uniquely identifiable by unique element of **{C, D}**. |
| **{A, C} -> B** | YES | As each element of **B** can be uniquely identifiable by unique element of **{A, C}**. |
| **{A, C} -> D** | YES | As each element of **D** can be uniquely identifiable by unique element of **{A, C}**. |

we can conclude from this table that, there is no single column that can be a primary key. We need to make composite key as a primary excluding combination of {B, C} as a primary key.