Begin check point

|  |  |  |
| --- | --- | --- |
| Transaction ID | Last LSN | State |
| T2 | 5 | U |
| T3 | 3 | U |

|  |  |
| --- | --- |
| Page ID | rec LSN |
| P1 | 1 |
| P2 | 2 |
| P3 | 3 |

Q5

(A)

|  |  |
| --- | --- |
| Page ID | rec LSN |
| P1 | 1 |
| P2 | 2 |
| P3 | 3 |

(B)

|  |  |  |
| --- | --- | --- |
| Transaction ID | Last LSN | State |
| T2 | 13 | U |

(C)

T2

(D)

There’s no CLR during the redo phase, because no transaction was aborted before the crash.

(E)

There are 2 CLR records are added in in the UNDO phase.

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