System clock – at a time when the trans started

Logical counter- increment after a new time stamp has been assigned .

Ts(1)< Ts(2)

10am< 11 am

10.5 am< 10 am invalid

Read TS – RTS(A)- largest TS of any transaction that exe read(A) succesfully

Write TS- WTS(A)- largest TS of any transaction that exe write(A) successfully

|  |  |  |  |
| --- | --- | --- | --- |
| TS(T1)-10 | TS(T2)- 20 | TS(T3)-30 | TS(T4)-40 |
| R1(x) |  |  |  |
| W1(x) |  |  |  |
|  |  | R3(x) |  |
|  | R2(x) |  |  |
|  |  |  | W4(x) |

RTS

Initially-t1(S) =0

Update t1- 0<10 True

Update t3- 10<30 True

Update t2- 30< 20 False

**RTS (x)- 30**

WTS

Initially – 0

Update t1- 0<10 True

Update t4 – 10<40 True

**WTS(x)- 40**