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HW 5

CSC 4402

4/16/18

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① (a) (SELECT sid
FROM s
WHERE rating <= 2)
INTERSECT
(SELECT sid
FROM r
WHERE bid = 10)

(b)

(c)

② (a) Yes, the given graph is S conflict serializable because there are no directed cycles.

(b) T_0, T_2, T_1, T_3, T_4

③ (a) T_0, T_1 and T_1, T_0

	A	B
initially	0	0
after T_0	0	1
after T_1	0	1

	A	B
initially	0	0
after T_1	1	0
after T_0	1	0

Consistency Met:

$$A=0 \vee B=0 \equiv T \vee F=T$$

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(b)

T_0
read(A)

read(B)
if $A=0$ then
 $B=B+1$

write(B)

T_1

read(B)
read(A)

if $B=0$ then $A=A+1$
write(A)

- ④ This schedule is S conflict serializable because there is not a cycle. Read(A) and Read(B) cannot be executed until the end.

⑤ (a)

<u>T1</u>	<u>T2</u>	<u>T3</u>
LX(A)	LX(C)	LX(B)
Read(A)	Read(C)	Read(B)
LX(B)	Write(C)	Write(B)
Read(B)	LX(A)	LX(C)
Write(A)	Read(A)	Read(C)
Write(B)	Write(A)	Write(C)