	Name: Naman Goyal
	Roll No: 180123029 Camlin Page Date 1 1
	(1) The crash happens and the last log record on the disk is < START U>, T is unconsmitted, therefore we undo its actions, from the end moving backwards. A -> 10
	9f the crash happens after (commt of U) and we have a committed transaction (U) and an uncommitted trans (T): we redo the actions of U in the order earliest first:- B -> 21, D -> 41.
15	we undo the actions of T from the end noving backwards: (-> 30, A -> 10.
(3)	9f the chash follows & T,E, 50, 51>. U has been committed, so me redo its actions Starting earliest first. B -> 21, D -> 41.
25	Tis un committed, so undo its actions, from the end back wards. E -> 50, (-> 30, A -> 10
(4)	If the crash follows commit T, both Hausitions are committed hence actions of both T and U undergo redo, earliest first
	$A \rightarrow 11$, $B \rightarrow 21$, $C \rightarrow 31$, $D \rightarrow 41$. $F \rightarrow 51$

and the bound and the house it is	
sof (2) (1) Disk reads from A and B 5	
in interest (B) printer (A) 21	
auxiens, the life bushing bulk wind	
(2) Disk write on B: w, (B)	
(3) Disk mad to llowed by disk wik to	(C:-
(3) Disk mad followed by disk write for	
as uncommitted them (T) in how the actions	
(M) Disk read followed by disk: write for	D'
11D), W(D)-00 50-8	
(5) Disk read followed by disk write for	(Ei-
15 4(E), W, (E): Ward and	
Tasks: h,(A); h,(B); w,(B); r,((); w,(C); h,(D)	,
(A); \(\lambda(E)\); \(\lambda	171
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	Camlin Page Date / /
Som	(3):-(1) x ₁ (A); x ₂ (A), x ₃ (B), w ₁ (A), x ₂ (C), x ₂ (B), w ₂ (B), w ₁ (C)
	12(B), w2(B), w1(C)
	Comparing $v_3(B)$ and $w_2(B) \Rightarrow 3 \rightarrow 2$.
	Comparing 7,(1) and W,(1) \Longrightarrow 2 \Longrightarrow 1 Thurspur, prevedence graph:
	mujou, pre voidend graph:
	$\boxed{3} \longrightarrow \boxed{0} \longrightarrow \boxed{0}$
10	: this is acyclic hence the schedule is conflict - scrializable.
(2)	x, (A), w, (B), x2(B), w, (U), x3(C), w3 (A)
1:	
,.	Comparing 6, (B) and r. (B) => 1-2
	Comparing $x_1(A)$ and $w_2(A) \Longrightarrow 1 \longrightarrow 3$. Comparing $w_1(B)$ and $x_2(B) \Longrightarrow 1 \longrightarrow 2$ Comparing $w_2(C)$ and $x_3(C) \Longrightarrow 2 \longrightarrow 3$.
	bruedern grap :- (1) -> (2)(3)
20	
	the graph is acyclic, it is conflict-
	Seriali Zable
(3)	W3(A), 8, (A), W, (B), 72(B), W2(C), Y3(C)
• 25	
	Comparing $w_3(A)$ and $r_1(A):= 3 \longrightarrow 1$ Comparing $w_1(B)$ and $r_2(B)= 1 \longrightarrow 2$
	Comparing was and vo(c) => 2 -3.
30	(3) (1) (2)
	graph is cyclic Herre, it isn't confeict serializable.