Devanshu S	Wana (Page No.)
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C-12	OS INCOMENTAL MANAGEMENT CONTRACTOR OF THE CONTR
	Lab Assignment 6
	Title: Process Synchronization (Deadlocks)
	too, plants
	FAQ's and asking the relation of the same
ans 1)	A deadblock is a situation in which more than one process is
	blocked because of it is holding a resource and also requires
	some resource that is acquired by some other process.
constr	chair anymucha anymuch povot no
-	Four neccessary situations conditions of a deadlock situation
dansora fi	are: 1 20001 - iborra statal deserta as contratal
1)	Mutual Exclusion: - only one process can use a resource at
	any given time.
	modetini produci kolinoro di sili
2)	Hold and wait: - A process is holding atteast one resource at
	a time and is waiting to acquire other resources held by
Joan has	some other process.
400071	No preemption: Resource can be released by a process
	voluntarily.
4. \	a la vita A actallaruss are mitas in circular
	circular wait: A set of process are waiting in circular
	Fashion for each other.
MARINE TO ST	Andrew Selection (1) to see Statution
ins 2)	Deadlock Starvation.
8	All processes keep waiting - High priority processes keep
donor o	for each other to complete executing and low priority
	and none of them get processes are blocked.
	executed.
	Resources are blocked by Resource is continously utilized by processes. high priority processes.
	procession.
AND DESCRIPTION OF THE PARTY OF	

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	Neccessary	conditions:			ned to the
	Mutal exclu	wion. Hold and	process.	January To	1 (0)
		emption and	101 310332		1811
	circular wa			-	
	Also Mown	as circular	- Also know	un as live	ed lock
	wait.	Ex Signa	i vallenti.	a distalla	Cal- A Trans
Marie I		me to smile		Sensus 1	
ans 3.		Resource Allocat &		Major	Major
	11	-on Policy		Advalage	D'a desal se
	11110 -	0	SOMO VIES	1101 Wifeges	Disadvantages.
	Detection	Very liberal.	Involve secondi	MOLEC	
100000		requested reso	cally to lost	dela	Inherent preemptor
		-wres are	for deadlock	aeray	108865-
		granted where	101 CREATINGE	in L' han	
	-	possible.	1- 22 3010 N	1111710011011	10000
1815		34 (136 (14)	at entire.	31000 3334	75,041 (3)
	Prevention	Comservative:	Dequestina	White wall	Inefficient and
		Comservative:	all schanges	BC -241898	dolars arosans
	1 13 1 101	resources		Hab applica	delays process initiation.
	-		greemption		
		1-	and resource	at activity	
100			ordering.	Di dello i ig	1
			0.000,110		
	Ausidance	e selects	Manipulate to	No	Future requirement
		mid way of			n must be know
		Detection and		is necess	
		preemption.			
		predipiton.	pean	ary!	blocked for long
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				1	periods.

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ans 4. Safety algorithm is used to check whether or not a system is in sta safe state or follows the safe sequence in Banker's Algorithm.

Safety algorithm.

1. let work and finish be vectors of length.

m and n respectively. Initialize

work = available

Anish [i] = false for i=1,2,...

- 2. a) finish [i] = false
 - b) Necdi & work

if no such i exists, go to step 4.

3. Work = work + Allocation

Anish Ci] = true

go to step 2

4. If finish (i) = true for all i; then the system is in sate State.

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