

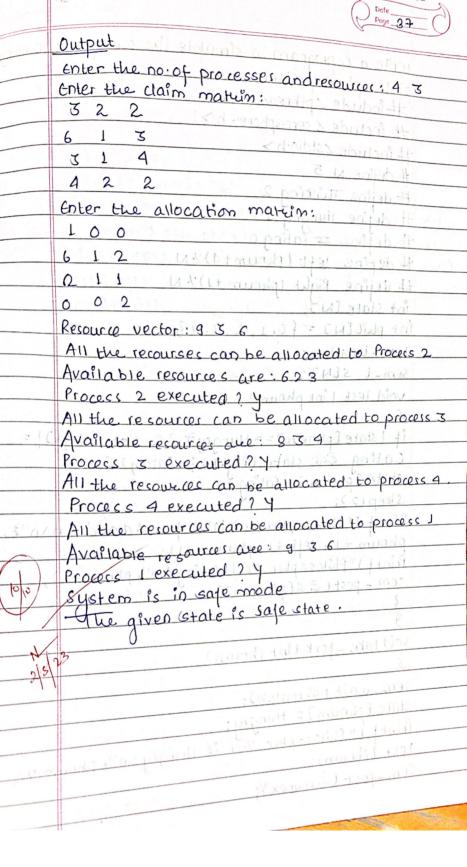
Write a c-program to simulate Banker's algorithm for the purpose of deadlock avoidance. #include /staio.h> # include < como. h> # include / string. h> void main () int alloc [10][10], man [10][10]; int avail [10], work[107, total [10]; int i, j, k, n, need[10][10]; int count =0, c =0; char finish [10]; Printf 1" Enter the no. of processes and resources: "); Scanf ("1/d/d", for, fim); for 1 "=0; 1 = n; 1 ++) finish [i)= ining markey 1/0/14 Printf ("Enter the claim matrim: \n"); for (1=0, 120; 1++) for(j=0;j2m;j++) 0000 Scanfi"/d", Lman[i][j]); Printf ("Enter the allocation matrim: \n"); for [P=0; "Cn; "++) for (j=0; jcm; j++) scange"ya", & apoceio (jo); (()) Printf (" pesource vector:"); for (1=0;9cm; 1++) scanf (" y.d", Atotal [1); for (1=0; 12m; 1++) avall [9)=0; for (i=0; 14n; 1++) for (j=0; j2m; j++) = Cj2(1) 20110= + Cj2 1200

classmate for (i=0; i < m; i++) work (i) = avail (i); for 1 =0; jcm; j++) work Cjo=total Cjo-work Cjo; for (1=0; 12n; 1++) for (j=0;j/m;j++) need (i) cj)= man [i) [j)-alloc [i)[j); A; for lize, (cn; itt) of mam. [or] for I were C=0: for (j=0, j2m;j++) if (= Em) if (c == m) Print I merthe no. Printf 1" All the resources can be allocated to Proces it Print + L"\n\n Available resources are: "). for 1 k = 0; kan; kt+) mind sult resmit alos work [K] += alloc [i] [K]; msi o = 1111 Print f (" 1.9d", work [K)); Print + 1"\n"); Printfi"\n Processid executed?:/c\n", iti finish [i]; count ++; if (count 1 = n) goto A;

Print f (" In System is in Safe mode"); Print (" In The given state is safe state");

else

getch, 1);



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2 2
                             matrix:
             allocation
      the
nter
0 0
1 2
1 1
0 2
esource vector:9 3 6
all the resources can be allocated to Process 2
vailable resources are: 6 2 3
rocess 2 executed?:y
all the resources can be allocated to Process 3
vailable resources are: 8 3 4
rocess 3 executed?:y
all the resources can be allocated to Process 4
vailable resources are: 8 3 6
Process 4 executed?:y
ll the resources can be allocated to Process 1
vailable resources are: 9 3 6
Process 1 executed?:y
System is in safe mode
The given state is safe state_
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C:\Users\STUDENT\Desktop\deadlock.exe