**CS 520 SR assignment Fall 2015**

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Script started on Wed Dec 02 17:44:39 2015

> cat final\_sr.sr

resource barrier()

var x:=0

var y:real

var n:=4 # total no of processes

var step:=10 # no of steps of each process

var ct:int

sem mutex:=1 #maximum 1 process is allowed into CS

sem done:=0 , continue[4]:=([4] 0)

process p(i:=1 to n)

fa j:=1 to step ->

write("process: ",i,", step: ",j)

V(done)

P(mutex)

x:=x+1

V(mutex)

if(x=4)->

fa w:=1 to 4 -> P(done) af

fa w:=1 to 4 -> V(continue[w]) af

x:=0

fi

P(continue[i])

y:=random()

ct:=int(y\*500+50)

nap(ct)

af

end

end

> sr final\_sr.sr

> a.out

process: 1 , step: 1

process: 2 , step: 1

process: 3 , step: 1

process: 4 , step: 1

process: 3 , step: 2

process: 4 , step: 2

process: 1 , step: 2

process: 2 , step: 2

process: 2 , step: 3

process: 1 , step: 3

process: 4 , step: 3

process: 3 , step: 3

process: 2 , step: 4

process: 4 , step: 4

process: 3 , step: 4

process: 1 , step: 4

process: 1 , step: 5

process: 4 , step: 5

process: 3 , step: 5

process: 2 , step: 5

process: 4 , step: 6

process: 2 , step: 6

process: 1 , step: 6

process: 3 , step: 6

process: 1 , step: 7

process: 3 , step: 7

process: 4 , step: 7

process: 2 , step: 7

process: 3 , step: 8

process: 4 , step: 8

process: 1 , step: 8

process: 2 , step: 8

process: 4 , step: 9

process: 3 , step: 9

process: 2 , step: 9

process: 1 , step: 9

process: 1 , step: 10

process: 2 , step: 10

process: 4 , step: 10

process: 3 , step: 10

> ^Dexit