CASE No	restrictionWarnMera	isFullMera	isEmptyMera	unlockMera		restrictionWarnDigital	isFullDigital	isEmptyDigital	unlockDigital	numOfStuInMera	numOfStuInDigital	
0	0	0	1	0		0	0	1	0	0	0	Initial state
1	0	0	1	0		0	0	0	1	0	1	A student with odd number of 1's (10101) wants to enter Digital. Unlock Digital. (item 9.b)
2	0	0	1	0		0	0	0	1	0	2	A student with even number of 1's (11101) wants to enter Digital. Digital is still unlocked
3	0	0	0	1		0	0	0	0	1	2	A student with even number of 1's (11101) wants to enter Mera. Unlock Mera. (item 9.b) Digital is locked again because 1 clock passed and there is no other enter/leave operation on Digital.
4	0	0	0	1		0	0	0	0	2	2	A student with odd number of 1's (10101) wants to enter Mera. Mera is still unlocked.
5	0	0	0	0		0	0	0	0	2	2	System is in idle mode. Mera should be locked (0) since 1 clock passed and there is no other enter/leave operation on Mera.
6	0	0	0	0		1	0	0	0	2	15	14 students with even number of 1's (11101) want to enter Digital. Check restrictionWarnDigital is active (1) Check students with even number of 1's cannot enter any more (unlockDigital=0) Check the total students in Digital is 15.
7	0	0	0	1		0	0	0	0	3	15	A student with even number of 1's (11101) want to enter Mera lab. **restrictionWarnDigital** should be passive (0) again. (item 8.c.i)
-	0	0	0	0		1	0	0	0	3	15	A student with even number of 1's (11101) want to enter Digital lab. **This step is not graded** and is used to activate restrictionWarning for next case.
8	0	0	0	0		0	0	0	1	3	14	A student leaves Digital. restrictionWarnDigital should be passive (0)
9	1	0	0	0		0	0	0	0	15	14	14 students with odd number of 1's (10101) want to enter Mera lab. Check restrictionWarnMera is active (1) Check students with odd number of 1's cannot enter any more (unlockmMera=0) Check the total students in Mera is 15.
10	0	0	0	0		0	0	0	0	15	14	System is in idle mode. restrictionWarnMera should be passive (0) since there is no student with odd number of 1's to enter Mera lab.(item 8.c.ii)
11	0	0	0	0		0	1	0	1	15	30	Let 16 students with odd number of 1's (10101) want to enter Digital. isFullDigital should be active (1) Check numOfStuInDigital is 30
12	0	0	0	0		0	1	0	0	15	30	A student with odd number of 1's (10101) want to enter Digital lab. Since the lab is Full, student cannot enter the lab. Check unlockDigital=0 Check numOfStuInDigital is still 30
13	0	1	0	1		0	1	0	0	30	30	Let 15 students with even number of 1's (11101) want to enter Mera. isFullMera should be active (1) Check numOfStuInMera is 30
14	0	1	0	0		0	1	0	0	30	30	A student with even number of 1's (11101) want to enter Mera lab. Since the lab is Full, student cannot enter the lab. Check unlockMera=0 Check numOfStuInMera is still 30

15	0	1	0	0		0	0	0	1	30	29	A student leaves Digital. isFullDigital should be passive (0) numOfStuInDigital should be 29
16	0	0	0	1		0	0	0	0	29	29	A student leaves Mera. isFullMera should be passive (0) numOfStuInMera should be 29
17	0	0	0	0		0	0	1	1	29	0	29 students leave Digital. isEmptyDigital should be active (1) numOfStuInDigital should be 0
18	0	0	0	0		0	0	1	0	29	0	System is in idle mode. There should be no change in values of isEmptyDigital and numOfStuInDigital
19	0	0	0	0		0	0	1	0	29	0	A student leaves digital. It is not possible to leave an empty lab (item 11)
20	0	0	1	0		0	0	1	0	0	0	31 students (29+2) leave mera. It is not possible to leave an empty lab.