1. X16
2. X13
3. X14
4. X15
5. X23
6. X24
7. X25
8. X29
9. X36
10. X37
11. X47
12. X48
13. X58
14. X59

X16 + X13 + X14 + X15 <= 10000 1,2,3,4

X23 + X24 +X25 + X29 <= 10000 5,6,7,8

X16 + X36 = 3000 1,9

X37 + X47 = 7000 10,11

X48 + X58 = 4000 11,12

X59 +X29 = 6000 14,8

X13 + X23 = X16 + X36 + X37 2,5,1,9,10

X14 + X24 = X47 + X48 3,6,11,12

X15 + X25 = X58 + X59 4,7,13,14