# TEST 7

The program below is a sequence of quadruples numbered 1-14.  Quadruples 5-13 comprise a loop.

Show which quadruples can be hoisted (moved to the point between quadruples 4 and 5). Write Y or N in each empty cell below.

| | | Can this quadruple be hoisted? (Y/N) |
|---|---|---|
| | 1:  read(i) | |
| | 2:  v = 2 | |
| | 3:  y = 3 | |
| | 4:  inc = 9 | |
| L O O P | 5:  x = v + 1 | Y |
| | 6:  z = x * 2 | N |
| | 7:  w = z * y | N |
| | 8:  y = 5 | N |
| | 9:  z = 0 | N |
| | 10: min = 0 | Y |
| | 11: inc = 1 | Y |
| | 12: i = i - inc | N |
| | 13: if (i > min) goto 5 | |
| | 14: write(y) | |