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REM MAP 6264 HW5 M/M/1/n simulation, based on Lindley

90 DIM Q(100)
95 INPUT n
100 FOR i = 1 TO 100000
    110 IA = -(1 / .8) * LOG(RND)
    120 T = T + IA
    130 W = W + X - IA
    140 IF W < 0 THEN W = 0
    150 IF W > 0 THEN 205
    160 SW = SW + W
    170 X = -LOG(RND)
    180 SX = SX + X
190 NEXT i
200 PRINT SX / T, c / 100000, SW / (100000 - c)
202 END
205 j = 0
210 j = j + 1
215 IF j > n THEN c = c + 1
218 IF j > n THEN X = 0
220 IF j > n THEN 190
230 IF Q(j) > T THEN 210
240 Q(j) = T + W
250 GOTO 160
```