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01 LBL "QUEUE" ;Queuing Statistics Program
02 LBL a       ;Restart program
03 SF 21
04 FC? 55     ;Type A - Single server model with arbitrary service times
05 CF 21     ;Type B - Multiserver model with poisson arrivals and
06 CF 00     ;      exponential service times
07 CF 01     ;Type C - Basic single server model
08 CF 02     ;Type D - Single server model with a finite queue
09 CF 03     ;Type E - Models with a finite calling population
10 CF 04     ;Type F - Single server model with arbitrary service
11 CF 29     ;      times and a priority queue discipline
12 SF 27
13 "A,B,C,D,E OR F?"
14 PROMPT     ;Select type of queue
15 GTO a      ;Restart program (line 2)
16 LBL 00
17 CF 27
18 SREG 00    ;SigmaREG
19 CLS        ;CLSigma
20 SREG 06    ;SigmaREG
21 CLS        ;CLSigma
22 CLX
23 "L=?"     ;Enter mean arrival rate of units
24 PROMPT
25 STO 00
26 X<=0?
27 GTO 00
28 LBL 01
29 CLX
30 "MU=?"    ;Enter mean service rate for units
31 PROMPT
32 STO 01
33 X>0?
34 RTN
35 GTO 01
36 LBL 32
37 CLX
38 "N=?"     ;Enter number of units
39 PROMPT
40 STO 02
41 "N"       ;Display number of units
42 XEQ 35
43 FC?C 01
44 RTN
45 GTO 32
46 LBL J      ;Review results for types A, B, C
47 FIX 4
48 "P="      ;Display server utilization factor
49 ARCL 04
50 PROMPT
51 LBL I      ;Review results for types D, E
52 "P0="     ;Display probability of 0 units in the system
53 RCL 03
54 XEQ 24
55 ARCL 03
56 PROMPT
57 FIX 4
58 "LS="     ;Display expected number of calling units
59 ARCL 06
60 PROMPT
61 "LQ="     ;Display expected or mean length of queue
62 ARCL 07
63 PROMPT
64 "WS="     ;Display expected or mean waiting & service time
65 ARCL 08
66 PROMPT
67 "WQ="     ;Display expected or mean waiting time in queue

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68 ARCL 09
69 PROMPT
70 LBL 17
71 FIX 0
72 "P" ;Display server utilization factor
73 ARCL 02
74 ">=" ;Append equal sign
75 RCL 05
76 XEQ 24
77 ARCL 05
78 RCL 02
79 X#0?
80 PROMPT
81 FC?C 00
82 GTO a ;Restart program (line 2)
83 LBL 15
84 FIX 0
85 "P OF >" ;Display probability of greater than K units in system
86 ARCL 11
87 ">=" ;Append equal sign
88 RCL 10
89 XEQ 24
90 ARCL 10
91 RCL 11
92 X#0?
93 PROMPT
94 GTO a ;Restart program (line 2)
95 LBL 24
96 FIX 4
97 X=0?
98 RTN
99 1 E2
100 *
101 ABS
102 1
103 X>Y?
104 SCI 4
105 RTN
106 LBL 33
107 69
108 X<Y?
109 ">" <= 69" ;Maximum queue size must be <= 69
110 X<Y?
111 GTO 04
112 X<>Y
113 LBL 35
114 X>0?
115 FRC
116 X=0?
117 RTN
118 ">" + INT" ;Number entered must be an integer
119 LBL 04
120 SF 01
121 LBL 34 ;Display PLSE (please)
122 ">" PLSE"
123 AVIEW
124 TONE 9
125 PSE
126 RTN
127 LBL H ;Type C calculate probability P of greater than K
128 SF 03
129 GTO 39
130 LBL C ;Basic single server model
131 XEQ 00
132 1
133 RCL 00
134 RCL 01
135 /
136 STO 04
137 -

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138 STO 03
139 GTO 04
140 LBL c      ;Type C calculate P(N)
141 SF 04
142 LBL 04
143 XEQ 32
144 RCL 03
145 RCL 04
146 RCL 02
147 Y^X
148 *
149 STO 05
150 FS?C 04
151 GTO 17
152 RCL 00
153 RCL 01
154 RCL 00
155 -
156 STO 10
157 /
158 STO 06
159 LASTX
160 1/X
161 STO 08
162 RCL 00
163 RCL 10
164 RCL 01
165 *
166 /
167 STO 09
168 RCL 00
169 ST* X
170 LASTX
171 /
172 STO 07
173 LBL 39
174 CLX
175 "K=?"      ;Enter number of units in the system
176 PROMPT
177 STO 11
178 "K"        ;Display number of units in the system
179 XEQ 35
180 FS?C 01
181 GTO 39
182 RCL 04
183 RCL 11
184 1
185 +
186 Y^X
187 STO 10
188 FS?C 03
189 GTO 15
190 SF 00
191 GTO J      ;Review results for types A, B, C (Line 46)
192 LBL B      ;Multiserver model with poisson arrivals
193 XEQ 00     ;and exponential service times
194 RCL 00
195 RCL 01
196 /
197 STO 11
198 LBL 05
199 CLX
200 "S=?"      ;Enter number of service facilities
201 PROMPT
202 STO 10
203 X=0?
204 STO 05
205 "S"        ;Display number of service facilities
206 XEQ 33
207 FS?C 01

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208 GTO 05
209 FS?C 03
210 RTN
211 LBL 07
212 XEQ 32
213 "N"           ;Display number of units
214 RCL 02
215 XEQ 33
216 FS?C 01
217 GTO 07
218 FS?C 02
219 RTN
220 RCL 10
221 1
222 -
223 .1
224 %
225 STO 08
226 LBL 08
227 RCL 11
228 RCL 08
229 INT
230 Y^X
231 LASTX
232 FACT
233 /
234 ST+ 09
235 ISG 08
236 GTO 08
237 1
238 RCL 11
239 STO 06
240 RCL 10
241 1/X
242 *
243 STO 04
244 -
245 1/X
246 RCL 06
247 RCL 10
248 Y^X
249 LASTX
250 FACT
251 /
252 *
253 RCL 09
254 *
255 1/X
256 STO 03
257 GTO 04
258 LBL b         ;Type B calculate P(N)
259 SF 02
260 SF 04
261 XEQ 07
262 RCL 03
263 LBL 04
264 RCL 11
265 RCL 02
266 Y^X
267 *
268 RCL 02
269 FACT
270 /
271 STO 05
272 LASTX
273 *
274 RCL 10
275 RCL 02
276 RCL 10
277 X<Y?

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278 SF 01
279 -
280 Y^X
281 RCL 10
282 FACT
283 *
284 X#0?
285 /
286 FS?C 01
287 STO 05
288 FS?C 04
289 GTO 17
290 RCL 06
291 RCL 10
292 Y^X
293 RCL 03
294 *
295 RCL 04
296 *
297 1
298 LASTX
299 -
300 X^2
301 RCL 10
302 FACT
303 *
304 /
305 STO 07
306 ST+ 06
307 RCL 00
308 /
309 STO 09
310 RCL 01
311 1/X
312 +
313 STO 08
314 GTO J      ;Review results for types A, B, C (Line 46)
315 LBL A      ;Type A - Single server model with arbitrary service times
316 XEQ 00
317 SIGN
318 RCL 00
319 RCL 01
320 /
321 STO 04
322 -
323 STO 03
324 LBL 38
325 CLX
326 "V=?"      ;Enter service time variance
327 PROMPT
328 STO 05
329 X<0?
330 GTO 38
331 RCL 00
332 X^2
333 *
334 RCL 04
335 X^2
336 +
337 RCL 03
338 ST+ X
339 /
340 STO 07
341 RCL 04
342 +
343 STO 06
344 RCL 07
345 RCL 00
346 /
347 STO 09

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348 RCL 01
349 1/X
350 +
351 STO 08
352 GTO J      ;Review results for types A, B, C (Line 46)
353 LBL d      ;Type D calculate P(N)
354 SF 04
355 GTO 10
356 LBL D      ;Single server model with a finite queue
357 XEQ 00
358 "L < MU"   ;Mean arrival rate must be >= mean service rate
359 RCL 00
360 RCL 01
361 X<=Y?
362 XEQ 34     ;Display PLSE (please) (line 121)
363 X<=Y?
364 GTO D
365 LBL 02
366 CLX
367 "M=?"      ;Enter maximum number of calling units
368 PROMPT
369 STO 04
370 X=0?
371 GTO 02
372 "M"        ;Display maximum number of calling units
373 XEQ 35
374 FS?C 01
375 GTO 02
376 1
377 RCL 00
378 RCL 01
379 /
380 STO 09
381 -
382 STO 08
383 1
384 LASTX
385 RCL 04
386 1
387 +
388 Y^X
389 STO 07
390 -
391 STO 06
392 RCL 08
393 RCL 06
394 /
395 STO 03
396 LBL 10
397 XEQ 32
398 RCL 04
399 RCL 02
400 FIX 0
401 "N <= "    ;N must be less than or equal to M
402 ARCL 04
403 X>Y?
404 XEQ 34     ;Display PLSE (please) (line 121)
405 X>Y?
406 GTO 10
407 RCL 00
408 RCL 01
409 /
410 RCL 02
411 Y^X
412 RCL 03
413 *
414 STO 05
415 FS?C 04
416 GTO 17
417 RCL 09

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418 RCL 08
419 /
420 RCL 07
421 RCL 04
422 1
423 +
424 *
425 RCL 06
426 /
427 -
428 STO 06
429 RCL 03
430 +
431 1
432 -
433 STO 07
434 LASTX
435 RCL 09
436 RCL 04
437 Y^X
438 RCL 03
439 *
440 -
441 RCL 00
442 *
443 /
444 STO 09
445 RCL 01
446 1/X
447 +
448 STO 08
449 GTO I      ;Review results for types D, E (Line 51)
450 LBL E      ;Models with a finite calling population
451 SF 02
452 XEQ B      ;Multiserver model with poisson arrivals (Line 192)
453 LBL 11
454 FS? 03
455 XEQ 05
456 CLX
457 "CP=?"     ;Enter number of units in calling population
458 PROMPT
459 STO 11
460 X=0?
461 GTO 11
462 "CP"       ;Display number of units in calling population
463 XEQ 33
464 FS?C 01
465 GTO 11
466 RCL 11
467 RCL 10
468 "S <= CP" ;Service facilities must be less than
469 X>Y?       ;number of units in calling population
470 XEQ 34     ;Display PLSE (please) (line 121)
471 X>Y?
472 SF 03
473 X>Y?
474 GTO 11
475 1
476 -
477 .1
478 %
479 STO 08
480 LBL 12
481 XEQ 26
482 RCL 04
483 FACT
484 *
485 /
486 RCL 00
487 RCL 01

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488 /
489 RCL 04
490 Y^X
491 *
492 FS?C 00
493 RTN
494 ST+ 03
495 ISG 08
496 GTO 12
497 RCL 11
498 .1
499 %
500 RCL 08
501 INT
502 +
503 STO 08
504 LBL 13
505 XEQ 26
506 RCL 10
507 FACT
508 *
509 /
510 RCL 10
511 RCL 04
512 RCL 10
513 -
514 Y^X
515 1/X
516 *
517 RCL 00
518 RCL 01
519 /
520 RCL 04
521 Y^X
522 *
523 FS?C 00
524 RTN
525 ST+ 03
526 ISG 08
527 GTO 13
528 RCL 03
529 1/X
530 STO 03
531 GTO 04
532 LBL e      ;Type E calculate P(N)
533 SF 04
534 SF 02
535 XEQ 07
536 LBL 04
537 RCL 02
538 RCL 11
539 X<Y?
540 CLX
541 X=0?
542 GTO 04
543 LBL 16
544 RCL 04
545 FC? 01
546 RCL 02
547 X=0?
548 GTO 04
549 FC? 01
550 SF 02
551 SF 00
552 RCL 10
553 X<Y?
554 SF 03
555 FC? 03
556 XEQ 12
557 FS?C 03

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558 XEQ 13
559 RCL 03
560 *
561 FS?C 01
562 RTN
563 LBL 04
564 STO 05
565 FS?C 04
566 GTO 17
567 RCL 11
568 .1
569 %
570 ISG X
571 STO 08
572 LBL 14
573 RCL 08
574 INT
575 STO 04
576 SF 01
577 XEQ 16
578 RCL 04
579 *
580 ST+ 06
581 ISG 08
582 GTO 14
583 RCL 06
584 RCL 11
585 RCL 06
586 -
587 RCL 00
588 *
589 STO 07
590 /
591 STO 08
592 RCL 01
593 1/X
594 -
595 STO 09
596 ST* 07
597 GTO I      ;Review results for types D, E (Line 51)
598 LBL 26
599 RCL 02
600 FC?C 02
601 RCL 08
602 INT
603 STO 04
604 RCL 11
605 FACT
606 RCL 11
607 RCL 04
608 -
609 FACT
610 RTN
611 LBL F      ;Single server model with arbitrary service
612 CF 27      ;times and a priority queue discipline
613 1
614 FIX 0
615 "NO. OF PCLS?"
616 PROMPT      ;Enter number of priority classes
617 FRC
618 X#0?      ;If number of priority classes is not integer,
619 GTO F      ;reenter number of priority classes (Line 611)
620 1
621 LASTX
622 X<=Y?      ;If number of priority classes is less than 1,
623 GTO F      ;reenter number of priority classes (Line 611)
624 LBL 03
625 ENTER
626 ENTER
627 9

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628 *
629 13
630 +
631 SF 25
632 RCL IND X
633 FS?C 25
634 GTO 04
635 "SET SIZE "
636 1
637 +
638 ARCL X
639 TONE 9 ;Insufficient data registers have been allocated
640 PROMPT ;Display proper number of registers to allocate
641 RDN
642 GTO 03
643 LBL 04
644 RDN
645 STO 01
646 RDN
647 STO 00
648 LBL 36 ;Display message warning the user that
649 "CLR 02-" ;data registers 02 to XX will be cleared
650 ARCL 01
651 ">" "?" ;Append space, question mark
652 SF 02
653 XEQ 37
654 X#Y?
655 GTO 36
656 RCL 01
657 1
658 +
659 SREG 01 ;SigmaREG
660 CLS ;CLSigma
661 6
662 -
663 ENTER
664 ENTER
665 LASTX
666 MOD
667 X<>Y
668 LASTX
669 1 E2
670 /
671 +
672 1 E3
673 /
674 +
675 LBL 09
676 SREG IND X ;SigmaREG
677 CLS ;CLSigma
678 ISG X
679 GTO 09
680 RCL 00
681 ENTER
682 ENTER
683 ENTER
684 STO 11
685 14
686 STO 04
687 +
688 STO 05
689 X<>Y
690 3
691 *
692 +
693 STO 06
694 +
695 STO 07
696 +
697 STO 08

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698 +
699 STO 09
700 RCL 00
701 .1
702 %
703 ISG X
704 STO 03
705 STO 10
706 LBL 19
707 CLX
708 "L"           ;Display mean arrival rate of units
709 XEQ 25
710 X<=0?
711 GTO 19
712 ST+ 01
713 STO IND 05
714 STO IND 07
715 SIGN
716 ST+ 05
717 LBL 06
718 CLX
719 "MU"          ;Display mean service rate for units
720 XEQ 25
721 X<=0?
722 GTO 06
723 STO IND 05
724 RCL IND 07
725 RCL 02
726 X<> Z
727 1/X
728 STO IND 09
729 X<> L
730 /
731 STO IND 06
732 STO IND 08
733 +
734 STO IND 04
735 STO 02
736 1
737 ST+ 05
738 X<=Y?
739 FS? 00
740 GTO 29
741 LBL 27
742 SF 00
743 "S"           ;Display number of service facilities
744 ARCL 10
745 ">="          ;Append equal sign
746 FIX 4
747 ARCL 02
748 AVIEW
749 TONE 9
750 PSE
751 FIX 0
752 X=Y?
753 SF 01
754 "OK TO RESET?"
755 LBL 37
756 AON
757 PROMPT
758 AOFF
759 ASTO X
760 "N"           ;Letter N for (N)o
761 ASTO Y
762 X#Y?
763 GTO 04
764 FS? 02
765 GTO a         ;Restart program (line 2)
766 GTO 29
767 LBL 04

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768 "Y"           ;Letter Y for (Y)es
769 ASTO Y
770 "ANS. Y/N" ;Must answer (Y)es or (N)o
771 X#Y?
772 XEQ 34       ;Display PLSE (please) (line 121)
773 FS?C 02
774 RTN
775 X#Y?
776 GTO 27
777 CF 01
778 RCL IND 07
779 ST- 01
780 RCL 10
781 INT
782 STO 10
783 1
784 -
785 STO 00
786 LASTX
787 X<Y?
788 GTO 04
789 "ONLY 1 PCL"
790 AVIEW        ;Warning if only 1 priority class
791 TONE 9
792 PSE
793 GTO a        ;Restart program (line 2)
794 LBL 04
795 XEQ 30
796 LBL 28
797 XEQ 18
798 ISG L
799 GTO 28
800 RCL 11
801 RCL 10
802 -
803 ST+ X
804 ST+ 05
805 RCL 00
806 .1
807 %
808 ISG X
809 STO 03
810 GTO 04
811 LBL 29
812 FS?C 01
813 GTO 27
814 CLX
815 "V"         ;Display service time variance
816 XEQ 25
817 X<0?
818 GTO 29
819 STO IND 05
820 XEQ 18
821 ISG 10
822 GTO 19
823 CF 00
824 LBL 04
825 RCL 03
826 STO 10
827 RCL 04
828 2
829 +
830 STO 05
831 RCL 08
832 STO 02
833 LBL 20
834 RCL IND 02
835 X^2
836 RCL IND 05
837 +

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838 RCL IND 04
839 *
840 ST+ 12
841 1
842 ST+ 02
843 3
844 ST+ 04
845 ST+ 05
846 ISG 10
847 GTO 20
848 FC?C 00
849 GTO 04
850 XEQ 30
851 ST+ L
852 LBL 31
853 1
854 ST+ 02
855 3
856 ST+ 04
857 ST+ 05
858 ISG L
859 GTO 31
860 LBL 04
861 13
862 STO 04
863 14
864 STO 05
865 RCL 11
866 +
867 STO 00
868 RCL 03
869 STO 10
870 CLX
871 STO 02
872 STO 03
873 LBL 21
874 RCL 12
875 1
876 RCL IND 04
877 -
878 1
879 RCL IND 05
880 -
881 *
882 ST+ X
883 /
884 STO IND 09
885 ST* IND 06
886 ST+ IND 08
887 RCL IND 00
888 RCL 01
889 /
890 *
891 ST+ 02
892 LASTX
893 RCL IND 08
894 *
895 ST+ 03
896 RCL IND 06
897 ST+ IND 07
898 3
899 ST+ 00
900 XEQ 18
901 ISG 10
902 GTO 21
903 LBL G      ;Review results for type F
904 RCL 10
905 FRC
906 ISG X
907 STO 10

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908 RCL 11
909 5
910 *
911 14
912 +
913 STO 04
914 LBL 22
915 "LQ" ;Display expected or mean length of queue
916 XEQ 23
917 "LS" ;Display expected number of calling units
918 XEQ 23
919 "WS" ;Display expected or mean waiting & service time
920 XEQ 23
921 "WQ" ;Display expected or mean waiting time in queue
922 XEQ 23
923 RCL 11
924 4
925 *
926 1
927 -
928 ST- 04
929 ISG 10
930 GTO 22
931 "WQ=" ;Display expected or mean wait time in queue
932 ARCL 02
933 PROMPT
934 "WS=" ;Display expected or mean wait time in system
935 ARCL 03
936 PROMPT
937 GTO a ;Restart program (line 2)
938 LBL 23
939 FIX 0
940 ARCL 10
941 ">=" ;Append equal sign
942 FIX 4
943 ARCL IND 04
944 PROMPT
945 RCL 11
946 ST+ 04
947 RTN
948 LBL 18
949 1
950 ST+ 04
951 ST+ 05
952 ST+ 06
953 ST+ 07
954 ST+ 08
955 ST+ 09
956 RTN
957 LBL 25
958 ARCL 10
959 ">=?" ;Append equal sign, question mark
960 PROMPT
961 RTN
962 LBL 30
963 RCL 11
964 RCL 00
965 -
966 .1
967 %
968 SIGN
969 ST+ L
970 END

```

0649C000F6005155455545CF7BA815AD37A915A900A901A902
A903A904A91DA81BFF412C422C432C442C45204F5220463F8E
D0007B01A91B99007099067077F34C3D3F8E307BB1000277F4
4D553D3F8E316485B200CF2077F34E3D3F8E32F14EE00023AB
0185D00020CF6F9C04F2503D9B048ECF6EF350303D23E00018
9B038E9C04F34C533D9B068EF34C513D9B078EF357533D9B08
8EF357513D9B098ECF119C00F1509B02F27F3D25E000189B05
22638EAB00D0007BCF0F9C00F650204F46203E9B0BF27F3D2A
E000189B0A2B638ED0007BCF189C046785111B12426111459D
0485CF21161944F77F203C3D20363944B50071CF2364696785
F77F202B20494E5405A801CF22F67F20504C53457E9F098985
CF6DA803D00027CF68E0000011202143344133B500CF7DA804
05E00020232422534235AA04D00011202120413A4336766038
202A21424339209473764337CF2777F34B3D3F8E3BF14BE000
23AA01D00027242B1140533AAA03D0000FA800D0006FCF67E0
00002021433B0677F3533D3F8E3A6735F153E00021AA01B600
AA038508E00020F14E22E00021AA01B800AA02852A11411A11
4C38092B28685376624392099608B900112B362A6042344160
262A537662434229426033B500CF7CA802A804E0000723052B
2253422262433576422A222A44A80141532A62426343AA0135
AA04D00011262A5323422442117641512A6242433792062043
3921604038D0006FCF66E000007A202143344133CF2677F356
3D3F8E3566D000262051422451402392734337244036272043
3921604038D0006FCF7EA804BB00CF69E00000F64C203C204D
55202146E0002246D000690377F34D3D3F8E3467B300F14DE0
0023AA01B30011202143394138117624114053374136282643
330BE0002024229C00F54E203C3D209B0445E0002245BB0020
21432253234235AA04D0001129284327241140422643413623
40114137762924532342412042433921604038D0006ECF6AA8
02E000670CAC03E0000577F443503D3F8E3B67BC00F24350E0
0021AA01BC002B2AF753203C3D20435045E0002245A80345BC
0011411A114C380DE0001A24624243202143245342AA008592
039608BD002B1A114C286840380EE0001A2A6242432A242A41
536042202143245342AA008592039608BE00236033B500CF7F
A804A802E0000705222B447767B500CF1024AD012267B500AD
01A802A8002A44A803AD03E0000CAA03E0000D2342AA018505
35AA04D000112B1A114C9673380F286834A801E00010244292
069608BF00262B26412042374338216041399407D0006ECF1A
22AB022868342B622B24416285CF6BA91B119C00FC4E4F2E20
4F462050434C533F8E6963D0006B117646D0006B0483831942
111340A81990F3AA19B500F95345542053495A452011409B73
9F098E75B4000575317530CF24F7434C522030322D9B01F37F
203FA802E0002579D0002421114099017016418383764B7176
111B124340111B1343400A99F3709673BA00208383833B1114
3440357113424036403740384039201A114C9673333ACF1377
F14CE000197BD000139201918591877A92050777F24D55E000
197BB7009185908722CE71609189CE74439186918840918432
11920546AC00D0001DCF1BA800F1539B0AF27F3D9C049B027E
9F09899C0078A801FC4F4B20544F2052455345543FCF258C8E
8B9A73F14E9A7279B500AC02D0007BD0001D05F1599A72F841
4E532E20592F4E79E00022AA028579D0001BA901908793012A
683A1141307644B500FA4F4E4C5920312050434C7E9F0989D0
007B05E0001ECF1CE000129674D0001C2B2A4192739205201A
114C967333B500CF1DAA01D0001B77F156E0001966D0001D91
85E00012960AD00013A90005233A241240352832CF14908251
908540908442920C1192021392049205960AD00014AB00B500
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HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Program Registers Needed: 230

Row 1 (1 - 3)



Row 2 (4 - 10)



Row 3 (10 - 13)



Row 4 (13 - 16)



Row 5 (17 - 23)



Row 6 (24 - 31)



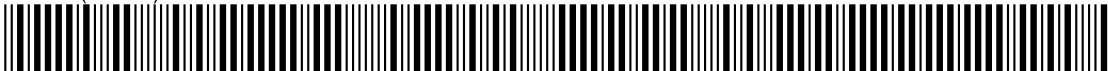
Row 7 (32 - 39)



Row 8 (40 - 46)



Row 9 (46 - 52)



Row 10 (52 - 58)



Row 11 (58 - 64)



Row 12 (64 - 69)



Row 13 (70 - 76)



Row 14 (76 - 83)



Row 15 (83 - 87)



Row 16 (87 - 94)



HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Row 17 (94 - 102)



Row 18 (103 - 109)



Row 19 (109 - 116)



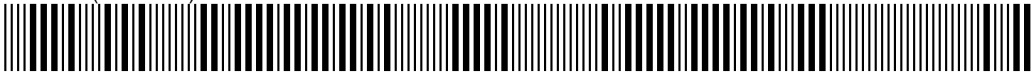
Row 20 (117 - 121)



Row 21 (121 - 126)



Row 22 (127 - 132)



Row 23 (133 - 142)



Row 24 (143 - 151)



Row 25 (151 - 163)



Row 26 (164 - 174)



Row 27 (175 - 180)



Row 28 (181 - 189)



Row 29 (189 - 195)



Row 30 (196 - 205)



Row 31 (205 - 212)



Row 32 (212 - 218)



Row 33 (218 - 229)



HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Row 34 (230 - 239)



Row 35 (240 - 252)



Row 36 (253 - 261)



Row 37 (261 - 272)



Row 38 (273 - 284)



Row 39 (285 - 293)



Row 40 (294 - 306)



Row 41 (306 - 315)



Row 42 (316 - 325)



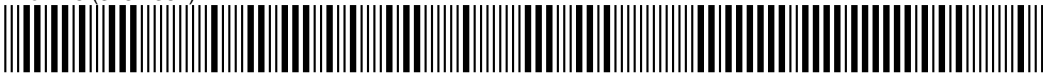
Row 43 (326 - 333)



Row 44 (334 - 345)



Row 45 (346 - 354)



Row 46 (355 - 358)



Row 47 (358 - 366)



Row 48 (367 - 373)



Row 49 (373 - 383)



Row 50 (384 - 396)



HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Row 51 (397 - 401)



Row 52 (402 - 410)



Row 53 (411 - 420)



Row 54 (421 - 433)



Row 55 (434 - 446)



Row 56 (447 - 453)



Row 57 (454 - 459)



Row 58 (460 - 465)



Row 59 (466 - 470)



Row 60 (470 - 479)



Row 61 (480 - 490)



Row 62 (491 - 498)



Row 63 (499 - 509)



Row 64 (510 - 522)



Row 65 (523 - 531)



Row 66 (531 - 538)



Row 67 (539 - 548)



HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Row 68 (548 - 555)



Row 69 (556 - 562)



Row 70 (563 - 570)



Row 71 (571 - 580)



Row 72 (580 - 590)



Row 73 (591 - 599)



Row 74 (600 - 611)



Row 75 (611 - 615)



Row 76 (615 - 620)



Row 77 (621 - 630)



Row 78 (631 - 635)



Row 79 (635 - 641)



Row 80 (642 - 649)



Row 81 (649 - 653)



Row 82 (653 - 661)



Row 83 (662 - 672)



Row 84 (672 - 680)

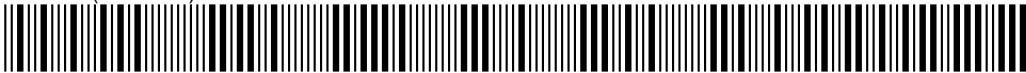


HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

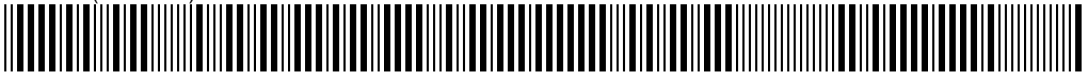
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Row 86 (693 - 703)



Row 87 (704 - 711)



Row 88 (711 - 719)



Row 89 (719 - 725)



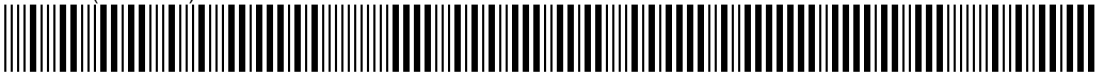
Row 90 (726 - 733)



Row 91 (734 - 741)



Row 92 (741 - 747)



Row 93 (747 - 754)



Row 94 (754 - 756)



Row 95 (757 - 764)



Row 96 (765 - 770)



Row 97 (770 - 773)



Row 98 (774 - 781)



Row 99 (782 - 789)



Row 100 (789 - 793)



Row 101 (794 - 799)



HP-41C Queue Program by Lauren Hansman PPC V9 N4 P93 May-Jul 1982

Row 102 (799 - 808)



Row 103 (808 - 815)



Row 104 (815 - 820)



Row 105 (821 - 829)



Row 106 (830 - 838)



Row 107 (839 - 846)



Row 108 (847 - 852)



Row 109 (852 - 859)



Row 110 (859 - 869)



Row 111 (870 - 879)



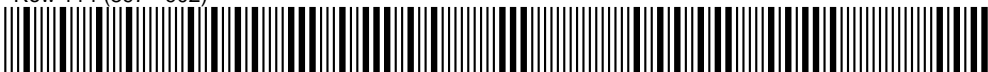
Row 112 (880 - 887)



Row 113 (888 - 896)



Row 114 (897 - 902)



Row 115 (903 - 912)



Row 116 (913 - 918)



Row 117 (918 - 922)



Row 118 (922 - 930)



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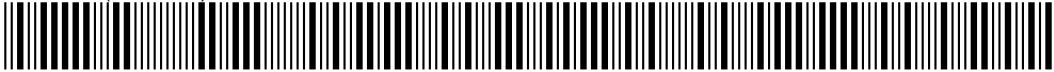
Row 119 (931 - 935)



Row 120 (936 - 941)



Row 121 (942 - 950)



Row 122 (950 - 957)



Row 123 (957 - 964)



Row 124 (965 - 970)

