

```
1 /Library/Java/JavaVirtualMachines/jdk-11.0.2.jdk/Contents/Home/bin/j
2 Please Enter number of customers :
3 100
4 ABLE CUSTOMER SIZE : 1
5 CID : 1
6 Time Since Last Arrival : 0
7 Arrival Time : 0
8 Service Time : 2
9 Time Server Begins : 0
10 Time Customer waits in Queue : 0
11 Time Service End : 2
12 Time Customer Spends in System : 2
13 Idle Time of Server : 0
14 Random Digit for Service Time : 14
15 Random Digit for Arrival Time : 71
16 Service Name : ABLE
17 +++++
18 CID : 2
19 Time Since Last Arrival : 2
20 Arrival Time : 2
21 Service Time : 5
22 Time Server Begins : 2
23 Time Customer waits in Queue : 0
24 Time Service End : 7
25 Time Customer Spends in System : 5
26 Idle Time of Server : 0
27 Random Digit for Service Time : 94
28 Random Digit for Arrival Time : 32
29 Service Name : ABLE
30 +++++
31 CID : 3
32 Time Since Last Arrival : 2
33 Arrival Time : 4
34 Service Time : 3
35 Time Server Begins : 4
36 Time Customer waits in Queue : 0
37 Time Service End : 7
38 Time Customer Spends in System : 3
39 Idle Time of Server : 0
40 Random Digit for Service Time : 10
41 Random Digit for Arrival Time : 41
42 Service Name : BACKER
43 +++++
44 CID : 4
45 Time Since Last Arrival : 2
46 Arrival Time : 6
47 Service Time : 4
48 Time Server Begins : 7
49 Time Customer waits in Queue : 1
50 Time Service End : 11
51 Time Customer Spends in System : 5
52 Idle Time of Server : 0
53 Random Digit for Service Time : 70
54 Random Digit for Arrival Time : 41
55 Service Name : ABLE
56 +++++
57 CID : 5
58 Time Since Last Arrival : 3
59 Arrival Time : 9
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60 Service Time : 4
61 Time Server Begins : 9
62 Time Customer waits in Queue : 0
63 Time Service End : 13
64 Time Customer Spends in System : 4
65 Idle Time of Server : 2
66 Random Digit for Service Time : 37
67 Random Digit for Arrival Time : 76
68 Service Name : BACKER
69 ++++++
70 CID : 6
71 Time Since Last Arrival : 1
72 Arrival Time : 10
73 Service Time : 3
74 Time Server Begins : 11
75 Time Customer waits in Queue : 1
76 Time Service End : 14
77 Time Customer Spends in System : 4
78 Idle Time of Server : 0
79 Random Digit for Service Time : 58
80 Random Digit for Arrival Time : 22
81 Service Name : ABLE
82 ++++++
83 CID : 7
84 Time Since Last Arrival : 3
85 Arrival Time : 13
86 Service Time : 4
87 Time Server Begins : 13
88 Time Customer waits in Queue : 0
89 Time Service End : 17
90 Time Customer Spends in System : 4
91 Idle Time of Server : 0
92 Random Digit for Service Time : 57
93 Random Digit for Arrival Time : 84
94 Service Name : BACKER
95 ++++++
96 CID : 8
97 Time Since Last Arrival : 1
98 Arrival Time : 14
99 Service Time : 5
100 Time Server Begins : 14
101 Time Customer waits in Queue : 0
102 Time Service End : 19
103 Time Customer Spends in System : 5
104 Idle Time of Server : 0
105 Random Digit for Service Time : 87
106 Random Digit for Arrival Time : 10
107 Service Name : ABLE
108 ++++++
109 CID : 9
110 Time Since Last Arrival : 3
111 Arrival Time : 17
112 Service Time : 4
113 Time Server Begins : 17
114 Time Customer waits in Queue : 0
115 Time Service End : 21
116 Time Customer Spends in System : 4
117 Idle Time of Server : 0
118 Random Digit for Service Time : 49
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119 Random Digit for Arrival Time : 80
120 Service Name : BACKER
121 ++++++
122 CID : 10
123 Time Since Last Arrival : 3
124 Arrival Time : 20
125 Service Time : 2
126 Time Server Begins : 20
127 Time Customer waits in Queue : 0
128 Time Service End : 22
129 Time Customer Spends in System : 2
130 Idle Time of Server : 1
131 Random Digit for Service Time : 26
132 Random Digit for Arrival Time : 82
133 Service Name : ABLE
134 ++++++
135 CID : 11
136 Time Since Last Arrival : 2
137 Arrival Time : 22
138 Service Time : 2
139 Time Server Begins : 22
140 Time Customer waits in Queue : 0
141 Time Service End : 24
142 Time Customer Spends in System : 2
143 Idle Time of Server : 0
144 Random Digit for Service Time : 14
145 Random Digit for Arrival Time : 40
146 Service Name : ABLE
147 ++++++
148 CID : 12
149 Time Since Last Arrival : 3
150 Arrival Time : 25
151 Service Time : 3
152 Time Server Begins : 25
153 Time Customer waits in Queue : 0
154 Time Service End : 28
155 Time Customer Spends in System : 3
156 Idle Time of Server : 1
157 Random Digit for Service Time : 43
158 Random Digit for Arrival Time : 71
159 Service Name : ABLE
160 ++++++
161 CID : 13
162 Time Since Last Arrival : 1
163 Arrival Time : 26
164 Service Time : 4
165 Time Server Begins : 26
166 Time Customer waits in Queue : 0
167 Time Service End : 30
168 Time Customer Spends in System : 4
169 Idle Time of Server : 5
170 Random Digit for Service Time : 49
171 Random Digit for Arrival Time : 16
172 Service Name : BACKER
173 ++++++
174 CID : 14
175 Time Since Last Arrival : 3
176 Arrival Time : 29
177 Service Time : 5
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178 Time Server Begins : 29
179 Time Customer waits in Queue : 0
180 Time Service End : 34
181 Time Customer Spends in System : 5
182 Idle Time of Server : 1
183 Random Digit for Service Time : 95
184 Random Digit for Arrival Time : 79
185 Service Name : ABLE
186 ++++++
187 CID : 15
188 Time Since Last Arrival : 2
189 Arrival Time : 31
190 Service Time : 4
191 Time Server Begins : 31
192 Time Customer waits in Queue : 0
193 Time Service End : 35
194 Time Customer Spends in System : 4
195 Idle Time of Server : 1
196 Random Digit for Service Time : 40
197 Random Digit for Arrival Time : 55
198 Service Name : BACKER
199 ++++++
200 CID : 16
201 Time Since Last Arrival : 1
202 Arrival Time : 32
203 Service Time : 4
204 Time Server Begins : 34
205 Time Customer waits in Queue : 2
206 Time Service End : 38
207 Time Customer Spends in System : 6
208 Idle Time of Server : 0
209 Random Digit for Service Time : 65
210 Random Digit for Arrival Time : 4
211 Service Name : ABLE
212 ++++++
213 CID : 17
214 Time Since Last Arrival : 1
215 Arrival Time : 33
216 Service Time : 6
217 Time Server Begins : 35
218 Time Customer waits in Queue : 2
219 Time Service End : 41
220 Time Customer Spends in System : 8
221 Idle Time of Server : 0
222 Random Digit for Service Time : 92
223 Random Digit for Arrival Time : 15
224 Service Name : BACKER
225 ++++++
226 CID : 18
227 Time Since Last Arrival : 4
228 Arrival Time : 37
229 Service Time : 3
230 Time Server Begins : 38
231 Time Customer waits in Queue : 1
232 Time Service End : 41
233 Time Customer Spends in System : 4
234 Idle Time of Server : 0
235 Random Digit for Service Time : 34
236 Random Digit for Arrival Time : 89
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237 Service Name : ABLE
238 ++++++
239 CID : 19
240 Time Since Last Arrival : 3
241 Arrival Time : 40
242 Service Time : 2
243 Time Server Begins : 41
244 Time Customer waits in Queue : 1
245 Time Service End : 43
246 Time Customer Spends in System : 3
247 Idle Time of Server : 0
248 Random Digit for Service Time : 23
249 Random Digit for Arrival Time : 73
250 Service Name : ABLE
251 ++++++
252 CID : 20
253 Time Since Last Arrival : 4
254 Arrival Time : 44
255 Service Time : 4
256 Time Server Begins : 44
257 Time Customer waits in Queue : 0
258 Time Service End : 48
259 Time Customer Spends in System : 4
260 Idle Time of Server : 1
261 Random Digit for Service Time : 82
262 Random Digit for Arrival Time : 93
263 Service Name : ABLE
264 ++++++
265 CID : 21
266 Time Since Last Arrival : 4
267 Arrival Time : 48
268 Service Time : 3
269 Time Server Begins : 48
270 Time Customer waits in Queue : 0
271 Time Service End : 51
272 Time Customer Spends in System : 3
273 Idle Time of Server : 0
274 Random Digit for Service Time : 38
275 Random Digit for Arrival Time : 95
276 Service Name : ABLE
277 ++++++
278 CID : 22
279 Time Since Last Arrival : 1
280 Arrival Time : 49
281 Service Time : 6
282 Time Server Begins : 49
283 Time Customer waits in Queue : 0
284 Time Service End : 55
285 Time Customer Spends in System : 6
286 Idle Time of Server : 8
287 Random Digit for Service Time : 85
288 Random Digit for Arrival Time : 20
289 Service Name : BACKER
290 ++++++
291 CID : 23
292 Time Since Last Arrival : 2
293 Arrival Time : 51
294 Service Time : 3
295 Time Server Begins : 51
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296 Time Customer waits in Queue : 0
297 Time Service End : 54
298 Time Customer Spends in System : 3
299 Idle Time of Server : 0
300 Random Digit for Service Time : 35
301 Random Digit for Arrival Time : 35
302 Service Name : ABLE
303 ++++++
304 CID : 24
305 Time Since Last Arrival : 2
306 Arrival Time : 53
307 Service Time : 4
308 Time Server Begins : 54
309 Time Customer waits in Queue : 1
310 Time Service End : 58
311 Time Customer Spends in System : 5
312 Idle Time of Server : 0
313 Random Digit for Service Time : 67
314 Random Digit for Arrival Time : 58
315 Service Name : ABLE
316 ++++++
317 CID : 25
318 Time Since Last Arrival : 1
319 Arrival Time : 54
320 Service Time : 3
321 Time Server Begins : 55
322 Time Customer waits in Queue : 1
323 Time Service End : 58
324 Time Customer Spends in System : 4
325 Idle Time of Server : 0
326 Random Digit for Service Time : 7
327 Random Digit for Arrival Time : 20
328 Service Name : BACKER
329 ++++++
330 CID : 26
331 Time Since Last Arrival : 2
332 Arrival Time : 56
333 Service Time : 4
334 Time Server Begins : 58
335 Time Customer waits in Queue : 2
336 Time Service End : 62
337 Time Customer Spends in System : 6
338 Idle Time of Server : 0
339 Random Digit for Service Time : 61
340 Random Digit for Arrival Time : 64
341 Service Name : ABLE
342 ++++++
343 CID : 27
344 Time Since Last Arrival : 2
345 Arrival Time : 58
346 Service Time : 3
347 Time Server Begins : 58
348 Time Customer waits in Queue : 0
349 Time Service End : 61
350 Time Customer Spends in System : 3
351 Idle Time of Server : 0
352 Random Digit for Service Time : 33
353 Random Digit for Arrival Time : 58
354 Service Name : BACKER
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355 ++++++
356 CID : 28
357 Time Since Last Arrival : 2
358 Arrival Time : 60
359 Service Time : 4
360 Time Server Begins : 61
361 Time Customer waits in Queue : 1
362 Time Service End : 65
363 Time Customer Spends in System : 5
364 Idle Time of Server : 0
365 Random Digit for Service Time : 45
366 Random Digit for Arrival Time : 38
367 Service Name : BACKER
368 ++++++
369 CID : 29
370 Time Since Last Arrival : 1
371 Arrival Time : 61
372 Service Time : 2
373 Time Server Begins : 62
374 Time Customer waits in Queue : 1
375 Time Service End : 64
376 Time Customer Spends in System : 3
377 Idle Time of Server : 0
378 Random Digit for Service Time : 2
379 Random Digit for Arrival Time : 14
380 Service Name : ABLE
381 ++++++
382 CID : 30
383 Time Since Last Arrival : 4
384 Arrival Time : 65
385 Service Time : 2
386 Time Server Begins : 65
387 Time Customer waits in Queue : 0
388 Time Service End : 67
389 Time Customer Spends in System : 2
390 Idle Time of Server : 1
391 Random Digit for Service Time : 20
392 Random Digit for Arrival Time : 89
393 Service Name : ABLE
394 ++++++
395 CID : 31
396 Time Since Last Arrival : 4
397 Arrival Time : 69
398 Service Time : 4
399 Time Server Begins : 69
400 Time Customer waits in Queue : 0
401 Time Service End : 73
402 Time Customer Spends in System : 4
403 Idle Time of Server : 2
404 Random Digit for Service Time : 64
405 Random Digit for Arrival Time : 98
406 Service Name : ABLE
407 ++++++
408 CID : 32
409 Time Since Last Arrival : 2
410 Arrival Time : 71
411 Service Time : 3
412 Time Server Begins : 71
413 Time Customer waits in Queue : 0
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414 Time Service End : 74
415 Time Customer Spends in System : 3
416 Idle Time of Server : 6
417 Random Digit for Service Time : 6
418 Random Digit for Arrival Time : 27
419 Service Name : BACKER
420 ++++++
421 CID : 33
422 Time Since Last Arrival : 4
423 Arrival Time : 75
424 Service Time : 5
425 Time Server Begins : 75
426 Time Customer waits in Queue : 0
427 Time Service End : 80
428 Time Customer Spends in System : 5
429 Idle Time of Server : 2
430 Random Digit for Service Time : 91
431 Random Digit for Arrival Time : 95
432 Service Name : ABLE
433 ++++++
434 CID : 34
435 Time Since Last Arrival : 2
436 Arrival Time : 77
437 Service Time : 4
438 Time Server Begins : 77
439 Time Customer waits in Queue : 0
440 Time Service End : 81
441 Time Customer Spends in System : 4
442 Idle Time of Server : 3
443 Random Digit for Service Time : 48
444 Random Digit for Arrival Time : 49
445 Service Name : BACKER
446 ++++++
447 CID : 35
448 Time Since Last Arrival : 1
449 Arrival Time : 78
450 Service Time : 3
451 Time Server Begins : 80
452 Time Customer waits in Queue : 2
453 Time Service End : 83
454 Time Customer Spends in System : 5
455 Idle Time of Server : 0
456 Random Digit for Service Time : 48
457 Random Digit for Arrival Time : 11
458 Service Name : ABLE
459 ++++++
460 CID : 36
461 Time Since Last Arrival : 3
462 Arrival Time : 81
463 Service Time : 3
464 Time Server Begins : 81
465 Time Customer waits in Queue : 0
466 Time Service End : 84
467 Time Customer Spends in System : 3
468 Idle Time of Server : 0
469 Random Digit for Service Time : 11
470 Random Digit for Arrival Time : 74
471 Service Name : BACKER
472 ++++++
```



```
473 CID : 37
474 Time Since Last Arrival : 2
475 Arrival Time : 83
476 Service Time : 2
477 Time Server Begins : 83
478 Time Customer waits in Queue : 0
479 Time Service End : 85
480 Time Customer Spends in System : 2
481 Idle Time of Server : 0
482 Random Digit for Service Time : 5
483 Random Digit for Arrival Time : 46
484 Service Name : ABLE
485 ++++++
486 CID : 38
487 Time Since Last Arrival : 1
488 Arrival Time : 84
489 Service Time : 5
490 Time Server Begins : 84
491 Time Customer waits in Queue : 0
492 Time Service End : 89
493 Time Customer Spends in System : 5
494 Idle Time of Server : 0
495 Random Digit for Service Time : 78
496 Random Digit for Arrival Time : 23
497 Service Name : BACKER
498 ++++++
499 CID : 39
500 Time Since Last Arrival : 4
501 Arrival Time : 88
502 Service Time : 3
503 Time Server Begins : 88
504 Time Customer waits in Queue : 0
505 Time Service End : 91
506 Time Customer Spends in System : 3
507 Idle Time of Server : 3
508 Random Digit for Service Time : 33
509 Random Digit for Arrival Time : 86
510 Service Name : ABLE
511 ++++++
512 CID : 40
513 Time Since Last Arrival : 2
514 Arrival Time : 90
515 Service Time : 4
516 Time Server Begins : 90
517 Time Customer waits in Queue : 0
518 Time Service End : 94
519 Time Customer Spends in System : 4
520 Idle Time of Server : 1
521 Random Digit for Service Time : 56
522 Random Digit for Arrival Time : 32
523 Service Name : BACKER
524 ++++++
525 CID : 41
526 Time Since Last Arrival : 2
527 Arrival Time : 92
528 Service Time : 5
529 Time Server Begins : 92
530 Time Customer waits in Queue : 0
531 Time Service End : 97
```

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532 Time Customer Spends in System : 5
533 Idle Time of Server : 1
534 Random Digit for Service Time : 84
535 Random Digit for Arrival Time : 26
536 Service Name : ABLE
537 ++++++
538 CID : 42
539 Time Since Last Arrival : 2
540 Arrival Time : 94
541 Service Time : 5
542 Time Server Begins : 94
543 Time Customer waits in Queue : 0
544 Time Service End : 99
545 Time Customer Spends in System : 5
546 Idle Time of Server : 0
547 Random Digit for Service Time : 62
548 Random Digit for Arrival Time : 59
549 Service Name : BACKER
550 ++++++
551 CID : 43
552 Time Since Last Arrival : 2
553 Arrival Time : 96
554 Service Time : 2
555 Time Server Begins : 97
556 Time Customer waits in Queue : 1
557 Time Service End : 99
558 Time Customer Spends in System : 3
559 Idle Time of Server : 0
560 Random Digit for Service Time : 11
561 Random Digit for Arrival Time : 34
562 Service Name : ABLE
563 ++++++
564 CID : 44
565 Time Since Last Arrival : 1
566 Arrival Time : 97
567 Service Time : 3
568 Time Server Begins : 99
569 Time Customer waits in Queue : 2
570 Time Service End : 102
571 Time Customer Spends in System : 5
572 Idle Time of Server : 0
573 Random Digit for Service Time : 55
574 Random Digit for Arrival Time : 19
575 Service Name : ABLE
576 ++++++
577 CID : 45
578 Time Since Last Arrival : 2
579 Arrival Time : 99
580 Service Time : 4
581 Time Server Begins : 99
582 Time Customer waits in Queue : 0
583 Time Service End : 103
584 Time Customer Spends in System : 4
585 Idle Time of Server : 0
586 Random Digit for Service Time : 58
587 Random Digit for Arrival Time : 48
588 Service Name : BACKER
589 ++++++
590 CID : 46
```

```
591 Time Since Last Arrival : 1
592 Arrival Time : 100
593 Service Time : 3
594 Time Server Begins : 102
595 Time Customer waits in Queue : 2
596 Time Service End : 105
597 Time Customer Spends in System : 5
598 Idle Time of Server : 0
599 Random Digit for Service Time : 44
600 Random Digit for Arrival Time : 20
601 Service Name : ABLE
602 ++++++
603 CID : 47
604 Time Since Last Arrival : 2
605 Arrival Time : 102
606 Service Time : 3
607 Time Server Begins : 103
608 Time Customer waits in Queue : 1
609 Time Service End : 106
610 Time Customer Spends in System : 4
611 Idle Time of Server : 0
612 Random Digit for Service Time : 7
613 Random Digit for Arrival Time : 49
614 Service Name : BACKER
615 ++++++
616 CID : 48
617 Time Since Last Arrival : 4
618 Arrival Time : 106
619 Service Time : 2
620 Time Server Begins : 106
621 Time Customer waits in Queue : 0
622 Time Service End : 108
623 Time Customer Spends in System : 2
624 Idle Time of Server : 1
625 Random Digit for Service Time : 29
626 Random Digit for Arrival Time : 86
627 Service Name : ABLE
628 ++++++
629 CID : 49
630 Time Since Last Arrival : 4
631 Arrival Time : 110
632 Service Time : 2
633 Time Server Begins : 110
634 Time Customer waits in Queue : 0
635 Time Service End : 112
636 Time Customer Spends in System : 2
637 Idle Time of Server : 2
638 Random Digit for Service Time : 26
639 Random Digit for Arrival Time : 93
640 Service Name : ABLE
641 ++++++
642 CID : 50
643 Time Since Last Arrival : 3
644 Arrival Time : 113
645 Service Time : 2
646 Time Server Begins : 113
647 Time Customer waits in Queue : 0
648 Time Service End : 115
649 Time Customer Spends in System : 2
```

```
650 Idle Time of Server : 1
651 Random Digit for Service Time : 4
652 Random Digit for Arrival Time : 81
653 Service Name : ABLE
654 ++++++
655 CID : 51
656 Time Since Last Arrival : 1
657 Arrival Time : 114
658 Service Time : 4
659 Time Server Begins : 114
660 Time Customer waits in Queue : 0
661 Time Service End : 118
662 Time Customer Spends in System : 4
663 Idle Time of Server : 8
664 Random Digit for Service Time : 45
665 Random Digit for Arrival Time : 13
666 Service Name : BACKER
667 ++++++
668 CID : 52
669 Time Since Last Arrival : 1
670 Arrival Time : 115
671 Service Time : 2
672 Time Server Begins : 115
673 Time Customer waits in Queue : 0
674 Time Service End : 117
675 Time Customer Spends in System : 2
676 Idle Time of Server : 0
677 Random Digit for Service Time : 27
678 Random Digit for Arrival Time : 25
679 Service Name : ABLE
680 ++++++
681 CID : 53
682 Time Since Last Arrival : 3
683 Arrival Time : 118
684 Service Time : 2
685 Time Server Begins : 118
686 Time Customer waits in Queue : 0
687 Time Service End : 120
688 Time Customer Spends in System : 2
689 Idle Time of Server : 1
690 Random Digit for Service Time : 6
691 Random Digit for Arrival Time : 74
692 Service Name : ABLE
693 ++++++
694 CID : 54
695 Time Since Last Arrival : 3
696 Arrival Time : 121
697 Service Time : 4
698 Time Server Begins : 121
699 Time Customer waits in Queue : 0
700 Time Service End : 125
701 Time Customer Spends in System : 4
702 Idle Time of Server : 1
703 Random Digit for Service Time : 59
704 Random Digit for Arrival Time : 81
705 Service Name : ABLE
706 ++++++
707 CID : 55
708 Time Since Last Arrival : 1
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```
709 Arrival Time : 122
710 Service Time : 6
711 Time Server Begins : 122
712 Time Customer waits in Queue : 0
713 Time Service End : 128
714 Time Customer Spends in System : 6
715 Idle Time of Server : 4
716 Random Digit for Service Time : 88
717 Random Digit for Arrival Time : 4
718 Service Name : BACKER
719 ++++++
720 CID : 56
721 Time Since Last Arrival : 2
722 Arrival Time : 124
723 Service Time : 2
724 Time Server Begins : 125
725 Time Customer waits in Queue : 1
726 Time Service End : 127
727 Time Customer Spends in System : 3
728 Idle Time of Server : 0
729 Random Digit for Service Time : 1
730 Random Digit for Arrival Time : 29
731 Service Name : ABLE
732 ++++++
733 CID : 57
734 Time Since Last Arrival : 1
735 Arrival Time : 125
736 Service Time : 4
737 Time Server Begins : 127
738 Time Customer waits in Queue : 2
739 Time Service End : 131
740 Time Customer Spends in System : 6
741 Idle Time of Server : 0
742 Random Digit for Service Time : 61
743 Random Digit for Arrival Time : 5
744 Service Name : ABLE
745 ++++++
746 CID : 58
747 Time Since Last Arrival : 2
748 Arrival Time : 127
749 Service Time : 6
750 Time Server Begins : 128
751 Time Customer waits in Queue : 1
752 Time Service End : 134
753 Time Customer Spends in System : 7
754 Idle Time of Server : 0
755 Random Digit for Service Time : 98
756 Random Digit for Arrival Time : 33
757 Service Name : BACKER
758 ++++++
759 CID : 59
760 Time Since Last Arrival : 2
761 Arrival Time : 129
762 Service Time : 3
763 Time Server Begins : 131
764 Time Customer waits in Queue : 2
765 Time Service End : 134
766 Time Customer Spends in System : 5
767 Idle Time of Server : 0
```

```
768 Random Digit for Service Time : 40
769 Random Digit for Arrival Time : 27
770 Service Name : ABLE
771 ++++++
772 CID : 60
773 Time Since Last Arrival : 3
774 Arrival Time : 132
775 Service Time : 5
776 Time Server Begins : 134
777 Time Customer waits in Queue : 2
778 Time Service End : 139
779 Time Customer Spends in System : 7
780 Idle Time of Server : 0
781 Random Digit for Service Time : 90
782 Random Digit for Arrival Time : 74
783 Service Name : ABLE
784 ++++++
785 CID : 61
786 Time Since Last Arrival : 2
787 Arrival Time : 134
788 Service Time : 6
789 Time Server Begins : 134
790 Time Customer waits in Queue : 0
791 Time Service End : 140
792 Time Customer Spends in System : 6
793 Idle Time of Server : 0
794 Random Digit for Service Time : 82
795 Random Digit for Arrival Time : 43
796 Service Name : BACKER
797 ++++++
798 CID : 62
799 Time Since Last Arrival : 2
800 Arrival Time : 136
801 Service Time : 5
802 Time Server Begins : 139
803 Time Customer waits in Queue : 3
804 Time Service End : 144
805 Time Customer Spends in System : 8
806 Idle Time of Server : 0
807 Random Digit for Service Time : 84
808 Random Digit for Arrival Time : 61
809 Service Name : ABLE
810 ++++++
811 CID : 63
812 Time Since Last Arrival : 2
813 Arrival Time : 138
814 Service Time : 3
815 Time Server Begins : 140
816 Time Customer waits in Queue : 2
817 Time Service End : 143
818 Time Customer Spends in System : 5
819 Idle Time of Server : 0
820 Random Digit for Service Time : 31
821 Random Digit for Arrival Time : 32
822 Service Name : BACKER
823 ++++++
824 CID : 64
825 Time Since Last Arrival : 1
826 Arrival Time : 139
```

```
827 Service Time : 6
828 Time Server Begins : 143
829 Time Customer waits in Queue : 4
830 Time Service End : 149
831 Time Customer Spends in System : 10
832 Idle Time of Server : 0
833 Random Digit for Service Time : 95
834 Random Digit for Arrival Time : 9
835 Service Name : BACKER
836 ++++++
837 CID : 65
838 Time Since Last Arrival : 2
839 Arrival Time : 141
840 Service Time : 4
841 Time Server Begins : 144
842 Time Customer waits in Queue : 3
843 Time Service End : 148
844 Time Customer Spends in System : 7
845 Idle Time of Server : 0
846 Random Digit for Service Time : 62
847 Random Digit for Arrival Time : 39
848 Service Name : ABLE
849 ++++++
850 CID : 66
851 Time Since Last Arrival : 1
852 Arrival Time : 142
853 Service Time : 4
854 Time Server Begins : 148
855 Time Customer waits in Queue : 6
856 Time Service End : 152
857 Time Customer Spends in System : 10
858 Idle Time of Server : 0
859 Random Digit for Service Time : 59
860 Random Digit for Arrival Time : 4
861 Service Name : ABLE
862 ++++++
863 CID : 67
864 Time Since Last Arrival : 2
865 Arrival Time : 144
866 Service Time : 5
867 Time Server Begins : 149
868 Time Customer waits in Queue : 5
869 Time Service End : 154
870 Time Customer Spends in System : 10
871 Idle Time of Server : 0
872 Random Digit for Service Time : 80
873 Random Digit for Arrival Time : 63
874 Service Name : BACKER
875 ++++++
876 CID : 68
877 Time Since Last Arrival : 2
878 Arrival Time : 146
879 Service Time : 2
880 Time Server Begins : 152
881 Time Customer waits in Queue : 6
882 Time Service End : 154
883 Time Customer Spends in System : 8
884 Idle Time of Server : 0
885 Random Digit for Service Time : 26
```

```
886 Random Digit for Arrival Time : 60
887 Service Name : ABLE
888 ++++++
889 CID : 69
890 Time Since Last Arrival : 2
891 Arrival Time : 148
892 Service Time : 3
893 Time Server Begins : 154
894 Time Customer waits in Queue : 6
895 Time Service End : 157
896 Time Customer Spends in System : 9
897 Idle Time of Server : 0
898 Random Digit for Service Time : 54
899 Random Digit for Arrival Time : 46
900 Service Name : ABLE
901 ++++++
902 CID : 70
903 Time Since Last Arrival : 2
904 Arrival Time : 150
905 Service Time : 6
906 Time Server Begins : 154
907 Time Customer waits in Queue : 4
908 Time Service End : 160
909 Time Customer Spends in System : 10
910 Idle Time of Server : 0
911 Random Digit for Service Time : 92
912 Random Digit for Arrival Time : 52
913 Service Name : BACKER
914 ++++++
915 CID : 71
916 Time Since Last Arrival : 2
917 Arrival Time : 152
918 Service Time : 3
919 Time Server Begins : 157
920 Time Customer waits in Queue : 5
921 Time Service End : 160
922 Time Customer Spends in System : 8
923 Idle Time of Server : 0
924 Random Digit for Service Time : 56
925 Random Digit for Arrival Time : 35
926 Service Name : ABLE
927 ++++++
928 CID : 72
929 Time Since Last Arrival : 2
930 Arrival Time : 154
931 Service Time : 2
932 Time Server Begins : 160
933 Time Customer waits in Queue : 6
934 Time Service End : 162
935 Time Customer Spends in System : 8
936 Idle Time of Server : 0
937 Random Digit for Service Time : 11
938 Random Digit for Arrival Time : 58
939 Service Name : ABLE
940 ++++++
941 CID : 73
942 Time Since Last Arrival : 3
943 Arrival Time : 157
944 Service Time : 5
```



```
945 Time Server Begins : 160
946 Time Customer waits in Queue : 3
947 Time Service End : 165
948 Time Customer Spends in System : 8
949 Idle Time of Server : 0
950 Random Digit for Service Time : 74
951 Random Digit for Arrival Time : 75
952 Service Name : BACKER
953 ++++++
954 CID : 74
955 Time Since Last Arrival : 3
956 Arrival Time : 160
957 Service Time : 4
958 Time Server Begins : 162
959 Time Customer waits in Queue : 2
960 Time Service End : 166
961 Time Customer Spends in System : 6
962 Idle Time of Server : 0
963 Random Digit for Service Time : 64
964 Random Digit for Arrival Time : 82
965 Service Name : ABLE
966 ++++++
967 CID : 75
968 Time Since Last Arrival : 3
969 Arrival Time : 163
970 Service Time : 3
971 Time Server Begins : 165
972 Time Customer waits in Queue : 2
973 Time Service End : 168
974 Time Customer Spends in System : 5
975 Idle Time of Server : 0
976 Random Digit for Service Time : 30
977 Random Digit for Arrival Time : 78
978 Service Name : BACKER
979 ++++++
980 CID : 76
981 Time Since Last Arrival : 2
982 Arrival Time : 165
983 Service Time : 4
984 Time Server Begins : 166
985 Time Customer waits in Queue : 1
986 Time Service End : 170
987 Time Customer Spends in System : 5
988 Idle Time of Server : 0
989 Random Digit for Service Time : 62
990 Random Digit for Arrival Time : 53
991 Service Name : ABLE
992 ++++++
993 CID : 77
994 Time Since Last Arrival : 3
995 Arrival Time : 168
996 Service Time : 5
997 Time Server Begins : 168
998 Time Customer waits in Queue : 0
999 Time Service End : 173
1000 Time Customer Spends in System : 5
1001 Idle Time of Server : 0
1002 Random Digit for Service Time : 78
1003 Random Digit for Arrival Time : 71
```

```
1004 Service Name : BACKER
1005 ++++++
1006 CID : 78
1007 Time Since Last Arrival : 3
1008 Arrival Time : 171
1009 Service Time : 3
1010 Time Server Begins : 171
1011 Time Customer waits in Queue : 0
1012 Time Service End : 174
1013 Time Customer Spends in System : 3
1014 Idle Time of Server : 1
1015 Random Digit for Service Time : 52
1016 Random Digit for Arrival Time : 70
1017 Service Name : ABLE
1018 ++++++
1019 CID : 79
1020 Time Since Last Arrival : 2
1021 Arrival Time : 173
1022 Service Time : 4
1023 Time Server Begins : 173
1024 Time Customer waits in Queue : 0
1025 Time Service End : 177
1026 Time Customer Spends in System : 4
1027 Idle Time of Server : 0
1028 Random Digit for Service Time : 51
1029 Random Digit for Arrival Time : 27
1030 Service Name : BACKER
1031 ++++++
1032 CID : 80
1033 Time Since Last Arrival : 2
1034 Arrival Time : 175
1035 Service Time : 4
1036 Time Server Begins : 175
1037 Time Customer waits in Queue : 0
1038 Time Service End : 179
1039 Time Customer Spends in System : 4
1040 Idle Time of Server : 1
1041 Random Digit for Service Time : 60
1042 Random Digit for Arrival Time : 29
1043 Service Name : ABLE
1044 ++++++
1045 CID : 81
1046 Time Since Last Arrival : 2
1047 Arrival Time : 177
1048 Service Time : 5
1049 Time Server Begins : 177
1050 Time Customer waits in Queue : 0
1051 Time Service End : 182
1052 Time Customer Spends in System : 5
1053 Idle Time of Server : 0
1054 Random Digit for Service Time : 64
1055 Random Digit for Arrival Time : 45
1056 Service Name : BACKER
1057 ++++++
1058 CID : 82
1059 Time Since Last Arrival : 4
1060 Arrival Time : 181
1061 Service Time : 3
1062 Time Server Begins : 181
```

```
1063 Time Customer waits in Queue : 0
1064 Time Service End : 184
1065 Time Customer Spends in System : 3
1066 Idle Time of Server : 2
1067 Random Digit for Service Time : 45
1068 Random Digit for Arrival Time : 88
1069 Service Name : ABLE
1070 ++++++
1071 CID : 83
1072 Time Since Last Arrival : 1
1073 Arrival Time : 182
1074 Service Time : 5
1075 Time Server Begins : 182
1076 Time Customer waits in Queue : 0
1077 Time Service End : 187
1078 Time Customer Spends in System : 5
1079 Idle Time of Server : 0
1080 Random Digit for Service Time : 71
1081 Random Digit for Arrival Time : 25
1082 Service Name : BACKER
1083 ++++++
1084 CID : 84
1085 Time Since Last Arrival : 2
1086 Arrival Time : 184
1087 Service Time : 2
1088 Time Server Begins : 184
1089 Time Customer waits in Queue : 0
1090 Time Service End : 186
1091 Time Customer Spends in System : 2
1092 Idle Time of Server : 0
1093 Random Digit for Service Time : 5
1094 Random Digit for Arrival Time : 51
1095 Service Name : ABLE
1096 ++++++
1097 CID : 85
1098 Time Since Last Arrival : 3
1099 Arrival Time : 187
1100 Service Time : 4
1101 Time Server Begins : 187
1102 Time Customer waits in Queue : 0
1103 Time Service End : 191
1104 Time Customer Spends in System : 4
1105 Idle Time of Server : 1
1106 Random Digit for Service Time : 77
1107 Random Digit for Arrival Time : 83
1108 Service Name : ABLE
1109 ++++++
1110 CID : 86
1111 Time Since Last Arrival : 2
1112 Arrival Time : 189
1113 Service Time : 4
1114 Time Server Begins : 189
1115 Time Customer waits in Queue : 0
1116 Time Service End : 193
1117 Time Customer Spends in System : 4
1118 Idle Time of Server : 2
1119 Random Digit for Service Time : 41
1120 Random Digit for Arrival Time : 39
1121 Service Name : BACKER
```

```
1122 ++++++
1123 CID : 87
1124 Time Since Last Arrival : 1
1125 Arrival Time : 190
1126 Service Time : 3
1127 Time Server Begins : 191
1128 Time Customer waits in Queue : 1
1129 Time Service End : 194
1130 Time Customer Spends in System : 4
1131 Idle Time of Server : 0
1132 Random Digit for Service Time : 51
1133 Random Digit for Arrival Time : 25
1134 Service Name : ABLE
1135 ++++++
1136 CID : 88
1137 Time Since Last Arrival : 4
1138 Arrival Time : 194
1139 Service Time : 3
1140 Time Server Begins : 194
1141 Time Customer waits in Queue : 0
1142 Time Service End : 197
1143 Time Customer Spends in System : 3
1144 Idle Time of Server : 0
1145 Random Digit for Service Time : 43
1146 Random Digit for Arrival Time : 99
1147 Service Name : ABLE
1148 ++++++
1149 CID : 89
1150 Time Since Last Arrival : 2
1151 Arrival Time : 196
1152 Service Time : 4
1153 Time Server Begins : 196
1154 Time Customer waits in Queue : 0
1155 Time Service End : 200
1156 Time Customer Spends in System : 4
1157 Idle Time of Server : 3
1158 Random Digit for Service Time : 53
1159 Random Digit for Arrival Time : 65
1160 Service Name : BACKER
1161 ++++++
1162 CID : 90
1163 Time Since Last Arrival : 1
1164 Arrival Time : 197
1165 Service Time : 5
1166 Time Server Begins : 197
1167 Time Customer waits in Queue : 0
1168 Time Service End : 202
1169 Time Customer Spends in System : 5
1170 Idle Time of Server : 0
1171 Random Digit for Service Time : 85
1172 Random Digit for Arrival Time : 3
1173 Service Name : ABLE
1174 ++++++
1175 CID : 91
1176 Time Since Last Arrival : 3
1177 Arrival Time : 200
1178 Service Time : 4
1179 Time Server Begins : 200
1180 Time Customer waits in Queue : 0
```

```
1181 Time Service End : 204
1182 Time Customer Spends in System : 4
1183 Idle Time of Server : 0
1184 Random Digit for Service Time : 36
1185 Random Digit for Arrival Time : 73
1186 Service Name : BACKER
1187 ++++++
1188 CID : 92
1189 Time Since Last Arrival : 1
1190 Arrival Time : 201
1191 Service Time : 3
1192 Time Server Begins : 202
1193 Time Customer waits in Queue : 1
1194 Time Service End : 205
1195 Time Customer Spends in System : 4
1196 Idle Time of Server : 0
1197 Random Digit for Service Time : 36
1198 Random Digit for Arrival Time : 11
1199 Service Name : ABLE
1200 ++++++
1201 CID : 93
1202 Time Since Last Arrival : 1
1203 Arrival Time : 202
1204 Service Time : 4
1205 Time Server Begins : 204
1206 Time Customer waits in Queue : 2
1207 Time Service End : 208
1208 Time Customer Spends in System : 6
1209 Idle Time of Server : 0
1210 Random Digit for Service Time : 54
1211 Random Digit for Arrival Time : 24
1212 Service Name : BACKER
1213 ++++++
1214 CID : 94
1215 Time Since Last Arrival : 1
1216 Arrival Time : 203
1217 Service Time : 4
1218 Time Server Begins : 205
1219 Time Customer waits in Queue : 2
1220 Time Service End : 209
1221 Time Customer Spends in System : 6
1222 Idle Time of Server : 0
1223 Random Digit for Service Time : 76
1224 Random Digit for Arrival Time : 14
1225 Service Name : ABLE
1226 ++++++
1227 CID : 95
1228 Time Since Last Arrival : 2
1229 Arrival Time : 205
1230 Service Time : 5
1231 Time Server Begins : 208
1232 Time Customer waits in Queue : 3
1233 Time Service End : 213
1234 Time Customer Spends in System : 8
1235 Idle Time of Server : 0
1236 Random Digit for Service Time : 80
1237 Random Digit for Arrival Time : 35
1238 Service Name : BACKER
1239 ++++++
```

```
1240 CID : 96
1241 Time Since Last Arrival : 1
1242 Arrival Time : 206
1243 Service Time : 2
1244 Time Server Begins : 209
1245 Time Customer waits in Queue : 3
1246 Time Service End : 211
1247 Time Customer Spends in System : 5
1248 Idle Time of Server : 0
1249 Random Digit for Service Time : 18
1250 Random Digit for Arrival Time : 2
1251 Service Name : ABLE
1252 ++++++
1253 CID : 97
1254 Time Since Last Arrival : 2
1255 Arrival Time : 208
1256 Service Time : 2
1257 Time Server Begins : 211
1258 Time Customer waits in Queue : 3
1259 Time Service End : 213
1260 Time Customer Spends in System : 5
1261 Idle Time of Server : 0
1262 Random Digit for Service Time : 5
1263 Random Digit for Arrival Time : 64
1264 Service Name : ABLE
1265 ++++++
1266 CID : 98
1267 Time Since Last Arrival : 2
1268 Arrival Time : 210
1269 Service Time : 4
1270 Time Server Begins : 213
1271 Time Customer waits in Queue : 3
1272 Time Service End : 217
1273 Time Customer Spends in System : 7
1274 Idle Time of Server : 0
1275 Random Digit for Service Time : 75
1276 Random Digit for Arrival Time : 39
1277 Service Name : ABLE
1278 ++++++
1279 CID : 99
1280 Time Since Last Arrival : 3
1281 Arrival Time : 213
1282 Service Time : 5
1283 Time Server Begins : 213
1284 Time Customer waits in Queue : 0
1285 Time Service End : 218
1286 Time Customer Spends in System : 5
1287 Idle Time of Server : 0
1288 Random Digit for Service Time : 77
1289 Random Digit for Arrival Time : 77
1290 Service Name : BACKER
1291 ++++++
1292 CID : 100
1293 Time Since Last Arrival : 2
1294 Arrival Time : 215
1295 Service Time : 4
1296 Time Server Begins : 217
1297 Time Customer waits in Queue : 2
1298 Time Service End : 221
```

```
1299 Time Customer Spends in System : 6
1300 Idle Time of Server : 0
1301 Random Digit for Service Time : 67
1302 Random Digit for Arrival Time : 52
1303 Service Name : ABLE
1304 ++++++
1305 ABLE CALCULATIONS :
1306 ABLE average waiting time for a customer : 1.2622950819672132
1307 ABLE probably that a customer has to wait in queue : 0.524590163934
1308 ABLE fraction of idle time of the server : 0.1085972850678733
1309 ABLE probably of the server being busy : 0.8914027149321266
1310 ABLE average service time : 3.2295081967213113
1311 ABLE expected value : 3.29
1312 ABLE average time between arrivals : 3.5833333333333335
1313 ABLE discrete uniform distribution : 2.5
1314 ABLE average waiting time of those who wait : 2.40625
1315 ABLE average time a customer spends in the system : 4.491803278688
1316 ABLE average time customer spends in the system : 4.4918032786885
1317 The able customer : 61
1318 The backer customer : 39
1319 ++++++
1320 BACKER CALCULATIONS :
1321 BACKER average waiting time for a customer : 0.7948717948717948
1322 BACKER probably that a customer has to wait in queue : 0.3333333333
1323 BACKER fraction of idle time of the server : 0.19724770642201836
1324 BACKER probably of the server being busy : 0.8027522935779816
1325 BACKER average service time : 4.384615384615385
1326 BACKER expected value : 4.25
1327 BACKER average time between arrivals : 5.605263157894737
1328 BACKER discrete uniform distribution : 2.5
1329 BACKER average waiting time of those who wait : 2.384615384615384
1330 BACKER average time a customer spends in the system : 5.179487179
1331 BACKER average time customer spends in the system : 5.1794871794
1332 The able customer : 61
1333 The backer customer : 39
1334 Excel written successfully..
1335
1336 Process finished with exit code 0
1337
```