

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



```
473 CID : 37
474 Time Since Last Arrival : 2
475 Arrival Time : 73
476 Service Time : 4
477 Time Server Begins : 73
478 Time Customer waits in Queue : 0
479 Time Service End : 77
480 Time Customer Spends in System : 4
481 Idle Time of Server : 3
482 Random Digit for Service Time : 41
483 Random Digit for Arrival Time : 57
484 Service Name : BACKER
485 ++++++
486 CID : 38
487 Time Since Last Arrival : 1
488 Arrival Time : 74
489 Service Time : 3
490 Time Server Begins : 76
491 Time Customer waits in Queue : 2
492 Time Service End : 79
493 Time Customer Spends in System : 5
494 Idle Time of Server : 0
495 Random Digit for Service Time : 46
496 Random Digit for Arrival Time : 25
497 Service Name : ABLE
498 ++++++
499 CID : 39
500 Time Since Last Arrival : 2
501 Arrival Time : 76
502 Service Time : 5
503 Time Server Begins : 77
504 Time Customer waits in Queue : 1
505 Time Service End : 82
506 Time Customer Spends in System : 6
507 Idle Time of Server : 0
508 Random Digit for Service Time : 70
509 Random Digit for Arrival Time : 34
510 Service Name : BACKER
511 ++++++
512 CID : 40
513 Time Since Last Arrival : 3
514 Arrival Time : 79
515 Service Time : 4
516 Time Server Begins : 79
517 Time Customer waits in Queue : 0
518 Time Service End : 83
519 Time Customer Spends in System : 4
520 Idle Time of Server : 0
521 Random Digit for Service Time : 69
522 Random Digit for Arrival Time : 74
523 Service Name : ABLE
524 ++++++
525 CID : 41
526 Time Since Last Arrival : 3
527 Arrival Time : 82
528 Service Time : 3
529 Time Server Begins : 82
530 Time Customer waits in Queue : 0
531 Time Service End : 85
```

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532 Time Customer Spends in System : 3
533 Idle Time of Server : 0
534 Random Digit for Service Time : 17
535 Random Digit for Arrival Time : 72
536 Service Name : BACKER
537 ++++++
538 CID : 42
539 Time Since Last Arrival : 1
540 Arrival Time : 83
541 Service Time : 5
542 Time Server Begins : 83
543 Time Customer waits in Queue : 0
544 Time Service End : 88
545 Time Customer Spends in System : 5
546 Idle Time of Server : 0
547 Random Digit for Service Time : 94
548 Random Digit for Arrival Time : 19
549 Service Name : ABLE
550 ++++++
551 CID : 43
552 Time Since Last Arrival : 4
553 Arrival Time : 87
554 Service Time : 6
555 Time Server Begins : 87
556 Time Customer waits in Queue : 0
557 Time Service End : 93
558 Time Customer Spends in System : 6
559 Idle Time of Server : 2
560 Random Digit for Service Time : 83
561 Random Digit for Arrival Time : 90
562 Service Name : BACKER
563 ++++++
564 CID : 44
565 Time Since Last Arrival : 2
566 Arrival Time : 89
567 Service Time : 2
568 Time Server Begins : 89
569 Time Customer waits in Queue : 0
570 Time Service End : 91
571 Time Customer Spends in System : 2
572 Idle Time of Server : 1
573 Random Digit for Service Time : 25
574 Random Digit for Arrival Time : 50
575 Service Name : ABLE
576 ++++++
577 CID : 45
578 Time Since Last Arrival : 1
579 Arrival Time : 90
580 Service Time : 3
581 Time Server Begins : 91
582 Time Customer waits in Queue : 1
583 Time Service End : 94
584 Time Customer Spends in System : 4
585 Idle Time of Server : 0
586 Random Digit for Service Time : 48
587 Random Digit for Arrival Time : 20
588 Service Name : ABLE
589 ++++++
590 CID : 46
```

```
591 Time Since Last Arrival : 1
592 Arrival Time : 91
593 Service Time : 5
594 Time Server Begins : 93
595 Time Customer waits in Queue : 2
596 Time Service End : 98
597 Time Customer Spends in System : 7
598 Idle Time of Server : 0
599 Random Digit for Service Time : 65
600 Random Digit for Arrival Time : 14
601 Service Name : BACKER
602 ++++++
603 CID : 47
604 Time Since Last Arrival : 2
605 Arrival Time : 93
606 Service Time : 4
607 Time Server Begins : 94
608 Time Customer waits in Queue : 1
609 Time Service End : 98
610 Time Customer Spends in System : 5
611 Idle Time of Server : 0
612 Random Digit for Service Time : 76
613 Random Digit for Arrival Time : 49
614 Service Name : ABLE
615 ++++++
616 CID : 48
617 Time Since Last Arrival : 2
618 Arrival Time : 95
619 Service Time : 2
620 Time Server Begins : 98
621 Time Customer waits in Queue : 3
622 Time Service End : 100
623 Time Customer Spends in System : 5
624 Idle Time of Server : 0
625 Random Digit for Service Time : 6
626 Random Digit for Arrival Time : 60
627 Service Name : ABLE
628 ++++++
629 CID : 49
630 Time Since Last Arrival : 4
631 Arrival Time : 99
632 Service Time : 3
633 Time Server Begins : 99
634 Time Customer waits in Queue : 0
635 Time Service End : 102
636 Time Customer Spends in System : 3
637 Idle Time of Server : 1
638 Random Digit for Service Time : 17
639 Random Digit for Arrival Time : 91
640 Service Name : BACKER
641 ++++++
642 CID : 50
643 Time Since Last Arrival : 3
644 Arrival Time : 102
645 Service Time : 4
646 Time Server Begins : 102
647 Time Customer waits in Queue : 0
648 Time Service End : 106
649 Time Customer Spends in System : 4
```

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650 Idle Time of Server : 2
651 Random Digit for Service Time : 63
652 Random Digit for Arrival Time : 70
653 Service Name : ABLE
654 ++++++
655 CID : 51
656 Time Since Last Arrival : 1
657 Arrival Time : 103
658 Service Time : 3
659 Time Server Begins : 103
660 Time Customer waits in Queue : 0
661 Time Service End : 106
662 Time Customer Spends in System : 3
663 Idle Time of Server : 1
664 Random Digit for Service Time : 5
665 Random Digit for Arrival Time : 23
666 Service Name : BACKER
667 ++++++
668 CID : 52
669 Time Since Last Arrival : 2
670 Arrival Time : 105
671 Service Time : 4
672 Time Server Begins : 106
673 Time Customer waits in Queue : 1
674 Time Service End : 110
675 Time Customer Spends in System : 5
676 Idle Time of Server : 0
677 Random Digit for Service Time : 61
678 Random Digit for Arrival Time : 32
679 Service Name : ABLE
680 ++++++
681 CID : 53
682 Time Since Last Arrival : 0
683 Arrival Time : 105
684 Service Time : 4
685 Time Server Begins : 106
686 Time Customer waits in Queue : 1
687 Time Service End : 110
688 Time Customer Spends in System : 5
689 Idle Time of Server : 0
690 Random Digit for Service Time : 42
691 Random Digit for Arrival Time : 0
692 Service Name : BACKER
693 ++++++
694 CID : 54
695 Time Since Last Arrival : 2
696 Arrival Time : 107
697 Service Time : 4
698 Time Server Begins : 110
699 Time Customer waits in Queue : 3
700 Time Service End : 114
701 Time Customer Spends in System : 7
702 Idle Time of Server : 0
703 Random Digit for Service Time : 63
704 Random Digit for Arrival Time : 26
705 Service Name : ABLE
706 ++++++
707 CID : 55
708 Time Since Last Arrival : 3
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709 Arrival Time : 110
710 Service Time : 5
711 Time Server Begins : 110
712 Time Customer waits in Queue : 0
713 Time Service End : 115
714 Time Customer Spends in System : 5
715 Idle Time of Server : 0
716 Random Digit for Service Time : 77
717 Random Digit for Arrival Time : 80
718 Service Name : BACKER
719 ++++++
720 CID : 56
721 Time Since Last Arrival : 2
722 Arrival Time : 112
723 Service Time : 3
724 Time Server Begins : 114
725 Time Customer waits in Queue : 2
726 Time Service End : 117
727 Time Customer Spends in System : 5
728 Idle Time of Server : 0
729 Random Digit for Service Time : 49
730 Random Digit for Arrival Time : 45
731 Service Name : ABLE
732 ++++++
733 CID : 57
734 Time Since Last Arrival : 1
735 Arrival Time : 113
736 Service Time : 6
737 Time Server Begins : 115
738 Time Customer waits in Queue : 2
739 Time Service End : 121
740 Time Customer Spends in System : 8
741 Idle Time of Server : 0
742 Random Digit for Service Time : 96
743 Random Digit for Arrival Time : 16
744 Service Name : BACKER
745 ++++++
746 CID : 58
747 Time Since Last Arrival : 3
748 Arrival Time : 116
749 Service Time : 4
750 Time Server Begins : 117
751 Time Customer waits in Queue : 1
752 Time Service End : 121
753 Time Customer Spends in System : 5
754 Idle Time of Server : 0
755 Random Digit for Service Time : 82
756 Random Digit for Arrival Time : 84
757 Service Name : ABLE
758 ++++++
759 CID : 59
760 Time Since Last Arrival : 2
761 Arrival Time : 118
762 Service Time : 4
763 Time Server Begins : 121
764 Time Customer waits in Queue : 3
765 Time Service End : 125
766 Time Customer Spends in System : 7
767 Idle Time of Server : 0
```

```
768 Random Digit for Service Time : 63
769 Random Digit for Arrival Time : 49
770 Service Name : ABLE
771 ++++++
772 CID : 60
773 Time Since Last Arrival : 4
774 Arrival Time : 122
775 Service Time : 3
776 Time Server Begins : 122
777 Time Customer waits in Queue : 0
778 Time Service End : 125
779 Time Customer Spends in System : 3
780 Idle Time of Server : 1
781 Random Digit for Service Time : 6
782 Random Digit for Arrival Time : 97
783 Service Name : BACKER
784 ++++++
785 CID : 61
786 Time Since Last Arrival : 1
787 Arrival Time : 123
788 Service Time : 3
789 Time Server Begins : 125
790 Time Customer waits in Queue : 2
791 Time Service End : 128
792 Time Customer Spends in System : 5
793 Idle Time of Server : 0
794 Random Digit for Service Time : 37
795 Random Digit for Arrival Time : 1
796 Service Name : ABLE
797 ++++++
798 CID : 62
799 Time Since Last Arrival : 1
800 Arrival Time : 124
801 Service Time : 5
802 Time Server Begins : 125
803 Time Customer waits in Queue : 1
804 Time Service End : 130
805 Time Customer Spends in System : 6
806 Idle Time of Server : 0
807 Random Digit for Service Time : 79
808 Random Digit for Arrival Time : 11
809 Service Name : BACKER
810 ++++++
811 CID : 63
812 Time Since Last Arrival : 2
813 Arrival Time : 126
814 Service Time : 4
815 Time Server Begins : 128
816 Time Customer waits in Queue : 2
817 Time Service End : 132
818 Time Customer Spends in System : 6
819 Idle Time of Server : 0
820 Random Digit for Service Time : 74
821 Random Digit for Arrival Time : 64
822 Service Name : ABLE
823 ++++++
824 CID : 64
825 Time Since Last Arrival : 1
826 Arrival Time : 127
```

```
827 Service Time : 3
828 Time Server Begins : 130
829 Time Customer waits in Queue : 3
830 Time Service End : 133
831 Time Customer Spends in System : 6
832 Idle Time of Server : 0
833 Random Digit for Service Time : 11
834 Random Digit for Arrival Time : 5
835 Service Name : BACKER
836 ++++++
837 CID : 65
838 Time Since Last Arrival : 4
839 Arrival Time : 131
840 Service Time : 2
841 Time Server Begins : 132
842 Time Customer waits in Queue : 1
843 Time Service End : 134
844 Time Customer Spends in System : 3
845 Idle Time of Server : 0
846 Random Digit for Service Time : 30
847 Random Digit for Arrival Time : 92
848 Service Name : ABLE
849 ++++++
850 CID : 66
851 Time Since Last Arrival : 2
852 Arrival Time : 133
853 Service Time : 3
854 Time Server Begins : 133
855 Time Customer waits in Queue : 0
856 Time Service End : 136
857 Time Customer Spends in System : 3
858 Idle Time of Server : 0
859 Random Digit for Service Time : 9
860 Random Digit for Arrival Time : 36
861 Service Name : BACKER
862 ++++++
863 CID : 67
864 Time Since Last Arrival : 3
865 Arrival Time : 136
866 Service Time : 2
867 Time Server Begins : 136
868 Time Customer waits in Queue : 0
869 Time Service End : 138
870 Time Customer Spends in System : 2
871 Idle Time of Server : 2
872 Random Digit for Service Time : 7
873 Random Digit for Arrival Time : 74
874 Service Name : ABLE
875 ++++++
876 CID : 68
877 Time Since Last Arrival : 1
878 Arrival Time : 137
879 Service Time : 4
880 Time Server Begins : 137
881 Time Customer waits in Queue : 0
882 Time Service End : 141
883 Time Customer Spends in System : 4
884 Idle Time of Server : 1
885 Random Digit for Service Time : 37
```

```
886 Random Digit for Arrival Time : 4
887 Service Name : BACKER
888 ++++++
889 CID : 69
890 Time Since Last Arrival : 2
891 Arrival Time : 139
892 Service Time : 2
893 Time Server Begins : 139
894 Time Customer waits in Queue : 0
895 Time Service End : 141
896 Time Customer Spends in System : 2
897 Idle Time of Server : 1
898 Random Digit for Service Time : 1
899 Random Digit for Arrival Time : 63
900 Service Name : ABLE
901 ++++++
902 CID : 70
903 Time Since Last Arrival : 1
904 Arrival Time : 140
905 Service Time : 4
906 Time Server Begins : 141
907 Time Customer waits in Queue : 1
908 Time Service End : 145
909 Time Customer Spends in System : 5
910 Idle Time of Server : 0
911 Random Digit for Service Time : 74
912 Random Digit for Arrival Time : 22
913 Service Name : ABLE
914 ++++++
915 CID : 71
916 Time Since Last Arrival : 1
917 Arrival Time : 141
918 Service Time : 5
919 Time Server Begins : 141
920 Time Customer waits in Queue : 0
921 Time Service End : 146
922 Time Customer Spends in System : 5
923 Idle Time of Server : 0
924 Random Digit for Service Time : 79
925 Random Digit for Arrival Time : 8
926 Service Name : BACKER
927 ++++++
928 CID : 72
929 Time Since Last Arrival : 2
930 Arrival Time : 143
931 Service Time : 3
932 Time Server Begins : 145
933 Time Customer waits in Queue : 2
934 Time Service End : 148
935 Time Customer Spends in System : 5
936 Idle Time of Server : 0
937 Random Digit for Service Time : 44
938 Random Digit for Arrival Time : 64
939 Service Name : ABLE
940 ++++++
941 CID : 73
942 Time Since Last Arrival : 4
943 Arrival Time : 147
944 Service Time : 6
```



```
945 Time Server Begins : 147
946 Time Customer waits in Queue : 0
947 Time Service End : 153
948 Time Customer Spends in System : 6
949 Idle Time of Server : 1
950 Random Digit for Service Time : 89
951 Random Digit for Arrival Time : 97
952 Service Name : BACKER
953 ++++++
954 CID : 74
955 Time Since Last Arrival : 2
956 Arrival Time : 149
957 Service Time : 4
958 Time Server Begins : 149
959 Time Customer waits in Queue : 0
960 Time Service End : 153
961 Time Customer Spends in System : 4
962 Idle Time of Server : 1
963 Random Digit for Service Time : 82
964 Random Digit for Arrival Time : 40
965 Service Name : ABLE
966 ++++++
967 CID : 75
968 Time Since Last Arrival : 1
969 Arrival Time : 150
970 Service Time : 0
971 Time Server Begins : 153
972 Time Customer waits in Queue : 3
973 Time Service End : 153
974 Time Customer Spends in System : 3
975 Idle Time of Server : 0
976 Random Digit for Service Time : 0
977 Random Digit for Arrival Time : 16
978 Service Name : ABLE
979 ++++++
980 CID : 76
981 Time Since Last Arrival : 1
982 Arrival Time : 151
983 Service Time : 2
984 Time Server Begins : 153
985 Time Customer waits in Queue : 2
986 Time Service End : 155
987 Time Customer Spends in System : 4
988 Idle Time of Server : 0
989 Random Digit for Service Time : 10
990 Random Digit for Arrival Time : 13
991 Service Name : ABLE
992 ++++++
993 CID : 77
994 Time Since Last Arrival : 1
995 Arrival Time : 152
996 Service Time : 4
997 Time Server Begins : 153
998 Time Customer waits in Queue : 1
999 Time Service End : 157
1000 Time Customer Spends in System : 5
1001 Idle Time of Server : 0
1002 Random Digit for Service Time : 53
1003 Random Digit for Arrival Time : 15
```

```
1004 Service Name : BACKER
1005 +++++
1006 CID : 78
1007 Time Since Last Arrival : 2
1008 Arrival Time : 154
1009 Service Time : 4
1010 Time Server Begins : 155
1011 Time Customer waits in Queue : 1
1012 Time Service End : 159
1013 Time Customer Spends in System : 5
1014 Idle Time of Server : 0
1015 Random Digit for Service Time : 59
1016 Random Digit for Arrival Time : 38
1017 Service Name : ABLE
1018 +++++
1019 CID : 79
1020 Time Since Last Arrival : 4
1021 Arrival Time : 158
1022 Service Time : 6
1023 Time Server Begins : 158
1024 Time Customer waits in Queue : 0
1025 Time Service End : 164
1026 Time Customer Spends in System : 6
1027 Idle Time of Server : 1
1028 Random Digit for Service Time : 97
1029 Random Digit for Arrival Time : 90
1030 Service Name : BACKER
1031 +++++
1032 CID : 80
1033 Time Since Last Arrival : 1
1034 Arrival Time : 159
1035 Service Time : 5
1036 Time Server Begins : 159
1037 Time Customer waits in Queue : 0
1038 Time Service End : 164
1039 Time Customer Spends in System : 5
1040 Idle Time of Server : 0
1041 Random Digit for Service Time : 86
1042 Random Digit for Arrival Time : 25
1043 Service Name : ABLE
1044 +++++
1045 CID : 81
1046 Time Since Last Arrival : 2
1047 Arrival Time : 161
1048 Service Time : 5
1049 Time Server Begins : 164
1050 Time Customer waits in Queue : 3
1051 Time Service End : 169
1052 Time Customer Spends in System : 8
1053 Idle Time of Server : 0
1054 Random Digit for Service Time : 88
1055 Random Digit for Arrival Time : 59
1056 Service Name : ABLE
1057 +++++
1058 CID : 82
1059 Time Since Last Arrival : 2
1060 Arrival Time : 163
1061 Service Time : 3
1062 Time Server Begins : 164
```

```
1063 Time Customer waits in Queue : 1
1064 Time Service End : 167
1065 Time Customer Spends in System : 4
1066 Idle Time of Server : 0
1067 Random Digit for Service Time : 5
1068 Random Digit for Arrival Time : 51
1069 Service Name : BACKER
1070 ++++++
1071 CID : 83
1072 Time Since Last Arrival : 2
1073 Arrival Time : 165
1074 Service Time : 4
1075 Time Server Begins : 167
1076 Time Customer waits in Queue : 2
1077 Time Service End : 171
1078 Time Customer Spends in System : 6
1079 Idle Time of Server : 0
1080 Random Digit for Service Time : 42
1081 Random Digit for Arrival Time : 59
1082 Service Name : BACKER
1083 ++++++
1084 CID : 84
1085 Time Since Last Arrival : 2
1086 Arrival Time : 167
1087 Service Time : 3
1088 Time Server Begins : 169
1089 Time Customer waits in Queue : 2
1090 Time Service End : 172
1091 Time Customer Spends in System : 5
1092 Idle Time of Server : 0
1093 Random Digit for Service Time : 47
1094 Random Digit for Arrival Time : 64
1095 Service Name : ABLE
1096 ++++++
1097 CID : 85
1098 Time Since Last Arrival : 1
1099 Arrival Time : 168
1100 Service Time : 3
1101 Time Server Begins : 171
1102 Time Customer waits in Queue : 3
1103 Time Service End : 174
1104 Time Customer Spends in System : 6
1105 Idle Time of Server : 0
1106 Random Digit for Service Time : 29
1107 Random Digit for Arrival Time : 22
1108 Service Name : BACKER
1109 ++++++
1110 CID : 86
1111 Time Since Last Arrival : 4
1112 Arrival Time : 172
1113 Service Time : 3
1114 Time Server Begins : 172
1115 Time Customer waits in Queue : 0
1116 Time Service End : 175
1117 Time Customer Spends in System : 3
1118 Idle Time of Server : 0
1119 Random Digit for Service Time : 33
1120 Random Digit for Arrival Time : 97
1121 Service Name : ABLE
```

```
1122 ++++++
1123 CID : 87
1124 Time Since Last Arrival : 2
1125 Arrival Time : 174
1126 Service Time : 3
1127 Time Server Begins : 174
1128 Time Customer waits in Queue : 0
1129 Time Service End : 177
1130 Time Customer Spends in System : 3
1131 Idle Time of Server : 0
1132 Random Digit for Service Time : 2
1133 Random Digit for Arrival Time : 65
1134 Service Name : BACKER
1135 ++++++
1136 CID : 88
1137 Time Since Last Arrival : 2
1138 Arrival Time : 176
1139 Service Time : 2
1140 Time Server Begins : 176
1141 Time Customer waits in Queue : 0
1142 Time Service End : 178
1143 Time Customer Spends in System : 2
1144 Idle Time of Server : 1
1145 Random Digit for Service Time : 6
1146 Random Digit for Arrival Time : 49
1147 Service Name : ABLE
1148 ++++++
1149 CID : 89
1150 Time Since Last Arrival : 1
1151 Arrival Time : 177
1152 Service Time : 6
1153 Time Server Begins : 177
1154 Time Customer waits in Queue : 0
1155 Time Service End : 183
1156 Time Customer Spends in System : 6
1157 Idle Time of Server : 0
1158 Random Digit for Service Time : 92
1159 Random Digit for Arrival Time : 23
1160 Service Name : BACKER
1161 ++++++
1162 CID : 90
1163 Time Since Last Arrival : 2
1164 Arrival Time : 179
1165 Service Time : 2
1166 Time Server Begins : 179
1167 Time Customer waits in Queue : 0
1168 Time Service End : 181
1169 Time Customer Spends in System : 2
1170 Idle Time of Server : 1
1171 Random Digit for Service Time : 12
1172 Random Digit for Arrival Time : 40
1173 Service Name : ABLE
1174 ++++++
1175 CID : 91
1176 Time Since Last Arrival : 2
1177 Arrival Time : 181
1178 Service Time : 3
1179 Time Server Begins : 181
1180 Time Customer waits in Queue : 0
```

```
1181 Time Service End : 184
1182 Time Customer Spends in System : 3
1183 Idle Time of Server : 0
1184 Random Digit for Service Time : 55
1185 Random Digit for Arrival Time : 65
1186 Service Name : ABLE
1187 ++++++
1188 CID : 92
1189 Time Since Last Arrival : 2
1190 Arrival Time : 183
1191 Service Time : 3
1192 Time Server Begins : 183
1193 Time Customer waits in Queue : 0
1194 Time Service End : 186
1195 Time Customer Spends in System : 3
1196 Idle Time of Server : 0
1197 Random Digit for Service Time : 18
1198 Random Digit for Arrival Time : 52
1199 Service Name : BACKER
1200 ++++++
1201 CID : 93
1202 Time Since Last Arrival : 2
1203 Arrival Time : 185
1204 Service Time : 5
1205 Time Server Begins : 185
1206 Time Customer waits in Queue : 0
1207 Time Service End : 190
1208 Time Customer Spends in System : 5
1209 Idle Time of Server : 1
1210 Random Digit for Service Time : 97
1211 Random Digit for Arrival Time : 27
1212 Service Name : ABLE
1213 ++++++
1214 CID : 94
1215 Time Since Last Arrival : 3
1216 Arrival Time : 188
1217 Service Time : 4
1218 Time Server Begins : 188
1219 Time Customer waits in Queue : 0
1220 Time Service End : 192
1221 Time Customer Spends in System : 4
1222 Idle Time of Server : 2
1223 Random Digit for Service Time : 58
1224 Random Digit for Arrival Time : 69
1225 Service Name : BACKER
1226 ++++++
1227 CID : 95
1228 Time Since Last Arrival : 3
1229 Arrival Time : 191
1230 Service Time : 5
1231 Time Server Begins : 191
1232 Time Customer waits in Queue : 0
1233 Time Service End : 196
1234 Time Customer Spends in System : 5
1235 Idle Time of Server : 1
1236 Random Digit for Service Time : 87
1237 Random Digit for Arrival Time : 70
1238 Service Name : ABLE
1239 ++++++
```

```
1240 CID : 96
1241 Time Since Last Arrival : 2
1242 Arrival Time : 193
1243 Service Time : 3
1244 Time Server Begins : 193
1245 Time Customer waits in Queue : 0
1246 Time Service End : 196
1247 Time Customer Spends in System : 3
1248 Idle Time of Server : 1
1249 Random Digit for Service Time : 15
1250 Random Digit for Arrival Time : 48
1251 Service Name : BACKER
1252 ++++++
1253 CID : 97
1254 Time Since Last Arrival : 4
1255 Arrival Time : 197
1256 Service Time : 5
1257 Time Server Begins : 197
1258 Time Customer waits in Queue : 0
1259 Time Service End : 202
1260 Time Customer Spends in System : 5
1261 Idle Time of Server : 1
1262 Random Digit for Service Time : 89
1263 Random Digit for Arrival Time : 90
1264 Service Name : ABLE
1265 ++++++
1266 CID : 98
1267 Time Since Last Arrival : 2
1268 Arrival Time : 199
1269 Service Time : 5
1270 Time Server Begins : 199
1271 Time Customer waits in Queue : 0
1272 Time Service End : 204
1273 Time Customer Spends in System : 5
1274 Idle Time of Server : 3
1275 Random Digit for Service Time : 64
1276 Random Digit for Arrival Time : 64
1277 Service Name : BACKER
1278 ++++++
1279 CID : 99
1280 Time Since Last Arrival : 4
1281 Arrival Time : 203
1282 Service Time : 2
1283 Time Server Begins : 203
1284 Time Customer waits in Queue : 0
1285 Time Service End : 205
1286 Time Customer Spends in System : 2
1287 Idle Time of Server : 1
1288 Random Digit for Service Time : 22
1289 Random Digit for Arrival Time : 87
1290 Service Name : ABLE
1291 ++++++
1292 CID : 100
1293 Time Since Last Arrival : 4
1294 Arrival Time : 207
1295 Service Time : 2
1296 Time Server Begins : 207
1297 Time Customer waits in Queue : 0
1298 Time Service End : 209
```

```
1299 Time Customer Spends in System : 2
1300 Idle Time of Server : 2
1301 Random Digit for Service Time : 21
1302 Random Digit for Arrival Time : 89
1303 Service Name : ABLE
1304 ++++++
1305 ABLE CALCULATIONS :
1306 ABLE average waiting time for a customer : 0.9830508474576272
1307 ABLE probably that a customer has to wait in queue : 0.508474576271
1308 ABLE fraction of idle time of the server : 0.09090909090909091
1309 ABLE probably of the server being busy : 0.9090909090909091
1310 ABLE average service time : 3.2203389830508473
1311 ABLE expected value : 3.29
1312 ABLE average time between arrivals : 3.5689655172413794
1313 ABLE discrete uniform distribution : 2.5
1314 ABLE average waiting time of those who wait : 1.9333333333333333
1315 ABLE average time a customer spends in the system : 4.2033898305084
1316 ABLE average time customer spends in the system : 4.2033898305084
1317 The able customer : 59
1318 The backer customer : 41
1319 ++++++
1320 BACKER CALCULATIONS :
1321 BACKER average waiting time for a customer : 0.7560975609756098
1322 BACKER probably that a customer has to wait in queue : 0.414634146
1323 BACKER fraction of idle time of the server : 0.11764705882352941
1324 BACKER probably of the server being busy : 0.8823529411764706
1325 BACKER average service time : 4.195121951219512
1326 BACKER expected value : 4.25
1327 BACKER average time between arrivals : 4.975
1328 BACKER discrete uniform distribution : 2.5
1329 BACKER average waiting time of those who wait : 1.823529411764705
1330 BACKER average time a customer spends in the system : 4.951219512
1331 BACKER average time customer spends in the system : 4.95121951219
1332 The able customer : 59
1333 The backer customer : 41
1334 Excel written successfully..
1335
1336 Process finished with exit code 0
1337
```