

```
oem@oem-X551CA: ~/Desktop/CSE102_HW10
oem@oem-X551CA:~/Desktop/CSE102_HW10$ gcc prime.c
oem@oem-X551CA:~/Desktop/CSE102_HW10$ ./a.out
```

```
Terminal
Open  Save
output_prime_dynamic_array.txt  x  output_prime_LiknedList.txt  x  prime.c  x  deneme.c  x

67
68     time_spent4=(double)(end_written1-begin1)/CLOCKS_PER_SEC;
69     fprintf(fl2, "\nRunning time to write to the file:%lf", time_spent4);
70
71
72     fclose(fl);
73     fl=fopen("data.txt", "r");
74     fl3=fopen("output_prime_LiknedList.txt", "a");
75     printf("\nNow, turn of linked list prime number finding.\n");
76     begin2=clock();
77     for(i=0; i<100; i++){
78         value=read_text(&*fl);
79         add_list(value);
80         control=prime_number(value);
81         if(control==1){
82             printf("%d\n", value);
83             fprintf(fl3, "%d\n", value);
84         }
85         if(i==500000) end500k2=clock();
86         if(i==750000) end750k2=clock();
87     }
88
89     endin2=clock();
90
91     time_spent1 = (double)(end500k2-begin2)/CLOCKS_PER_SEC;
92     time_spent2 = (double)(end750k2-begin2)/CLOCKS_PER_SEC;
93     time_spent3 = (double)(endin2-begin2)/CLOCKS_PER_SEC;
94
95     fprintf(fl3, "\n\nRunning time between 1 and 500.000:%lf", time_spent1);
96     fprintf(fl3, "\nRunning time between 1 and 750.000:%lf", time_spent2);
97     fprintf(fl3, "\nRunning time between 1 and 1.000.000:%lf", time_spent3);
98     end_written2=clock();
99
100     time_spent4=(double)(end_written2-begin2)/CLOCKS_PER_SEC;
101     fprintf(fl3, "\nRunning time to write to the file:%lf", time_spent4);
```

```
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oem@oem-X551CA:~/Desktop/CSE102_HW10$ gcc prime.c
oem@oem-X551CA:~/Desktop/CSE102_HW10$ ./a.out
2
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```

```
oem@oem-X551CA: ~/Desktop/CSE102_HW10
$29003
$29007
$29027
$29033
$29037
$29043
$29049
$29051
$29097
$29103
$29117
$29121
$29127
$29129
$29153
$29157
$29181
$29183
$29213
$29229
$29237
$29241
$29259
$29271
$29273
$29301
$29307
$29313
$29327
$29343
$29349
$29357
$29381
$29393
$29411
$29421
$29423
$29471
$29489
```

```
Terminal
Open  Save
output_prime_dynamic_array.txt  x  output_prime_LiknedList.txt  x  prime.c  x  deneme.c  x

67
68     time_spent4=(double)(end_written1-begin1)/CLOCKS_PER_SEC;
69     fprintf(fl2, "\nRunning time to write to the file:%lf", time_spent4);
70
71
72     fclose(fl);
73     fl=fopen("data.txt", "r");
74     fl3=fopen("output_prime_LiknedList.txt", "a");
75     printf("\nNow, turn of linked list prime number finding.\n");
76     begin2=clock();
77     for(i=0; i<100; i++){
78         value=read_text(&*fl);
79         add_list(value);
80         control=prime_number(value);
81         if(control==1){
82             printf("%d\n", value);
83             fprintf(fl3, "%d\n", value);
84         }
85         if(i==500000) end500k2=clock();
86         if(i==750000) end750k2=clock();
87     }
88     end1m2=clock();
89
90     time_spent1 = (double)(end500k2-begin2)/CLOCKS_PER_SEC;
91     time_spent2 = (double)(end750k2-begin2)/CLOCKS_PER_SEC;
92     time_spent3 = (double)(end1m2-begin2)/CLOCKS_PER_SEC;
93
94     fprintf(fl3, "\n\nRunning time between 1 and 500.000:%lf", time_spent1);
95     fprintf(fl3, "\nRunning time between 1 and 750.000:%lf", time_spent2);
96     fprintf(fl3, "\nRunning time between 1 and 1.000.000:%lf", time_spent3);
97     end_written2=clock();
98
99     time_spent4=(double)(end_written2-begin2)/CLOCKS_PER_SEC;
100    fprintf(fl3, "\nRunning time to write to the file:%lf", time_spent4);
101
```

```
oem@oem-X551CA: ~/Desktop/CSE102_HW10
Now, turn of linked list prime number finding.
2
3
4
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6
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11
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37
41
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```

```
oem@oem-X551CA: ~/Desktop/CSE102_HW10
13421
13441
13451
13457
13463
13469
13477
13487
13499
13513
13523
13537
13553
13567
13577
13591
13597
13613
13619
13627
13633
13649
13669
13679
13681
13687
13691
13693
13697
13709
13711
13721
13723
13729
13751
13757
13759
13763
13781
oem@oem-X551CA: ~/Desktop/CSE102_HW10$
```

```
oem@oem-X551CA: ~/Desktop/CSE102_HW10
999389
999431
999433
999437
999451
999491
999499
999521
999529
999541
999553
999563
999599
999611
999613
999623
999631
999653
999667
999671
999683
999721
999727
999749
999763
999769
999773
999809
999853
999863
999883
999907
999917
999931
999953
999959
999961
999979
999983
oem@oem-X551CA: ~/Desktop/CSE102_HW10$
```

output_prime_LiknedList.txt (~/Desktop/CSE102_HW10) - gedit

Open Save

prime.c x output_prime_dynamic_array.txt x output_prime_LiknedList.txt x 161044069.c x

```
78470 999553
78471 999563
78472 999599
78473 999611
78474 999613
78475 999623
78476 999631
78477 999653
78478 999667
78479 999671
78480 999683
78481 999721
78482 999727
78483 999749
78484 999763
78485 999769
78486 999773
78487 999809
78488 999853
78489 999863
78490 999883
78491 999907
78492 999917
78493 999931
78494 999953
78495 999959
78496 999961
78497 999979
78498 999983
78499
78500
78501 Running time between 1 and 500.000:31.627421
78502 Running time between 1 and 750.000:68.490901
78503 Running time between 1 and 1.000.000:118.624811
78504 Running time to write to the file:118.624822
```

Plain Text Tab Width: 4 Ln 1, Col 1 INS

output_prime_dynamic_array.txt (~/Desktop/CSE102_HW10) - gedit

Open Save

prime.c x output_prime_dynamic_array.txt x

```
78470 999553
78471 999563
78472 999599
78473 999611
78474 999613
78475 999623
78476 999631
78477 999653
78478 999667
78479 999671
78480 999683
78481 999721
78482 999727
78483 999749
78484 999763
78485 999769
78486 999773
78487 999809
78488 999853
78489 999863
78490 999883
78491 999907
78492 999917
78493 999931
78494 999953
78495 999959
78496 999961
78497 999979
78498 999983
78499
78500
78501 Running time between 1 and 500.000:31.720260
78502 Running time between 1 and 750.000:69.201889
78503 Running time between 1 and 1.000.000:119.767312
78504 Running time to write to the file:119.767323
```

Plain Text Tab Width: 4 Ln 78499, Col 1 INS