```
Last login: Fri May 31 11:12:39 on ttys000
dad@Jayui-MacBookPro-i5 Solution % make
gcc -Wall -0 -c client.c
gcc -Wall -0 -c pthread pool.c
gcc -o client client.o pthread_pool.o
dad@Jayui-MacBookPro-i5 Solution % ./client
--- 스레드풀 파라미터 한계 검증 ---
pthreaad_pool_init(): 일꾼 스레드 최대 수 초과.....PASSED
pthreaad_pool_init(): 대기열 최대 용량 초과.....PASSED
--- 스레드풀 최기화와 종료 검증 ---
pthread pool init(): 완료.....PASSED
pthread_pool_shutdown(): 완료.....PASSED
pthread_pool_init(): 완료.....PASSED
pthread_pool_shutdown(): 완료.....PASSED
--- 스레드풀 기본 동작 검증 ---
<10><11><1><2><3><4><5><6><7><9><12><20><13><25><26><27><28><29><30>
<31><32><8><14><15><0><17><18><19><21><22><23><16><33><24><36><44><3
4><37><38><50><51><39><40><41><42><43><45><46><48><49><52><35><53><4
7><54><56><55><57><58><60><61><59><62><63>[1][2][3][4][5][6][7][8]
[9] [0] [10] [12] [13] [14] [15] [17] [16] [19] [18] [20] [21] [22] [11] [23] [24]
[25] [27] [28] [29] [26] [31] [32] [33] [30] [34] [35] [36] [37] [38] [39] [41] [40]
[42] [43] [44] [46] [47] [45] [48] [50] [51] [52] [53] [54] [55] [57] [49]
[56].....PASSED
--- 스레드풀 종료 방식 검증 ---
소수 0개를 찾았다.
일꾼 스레드가 하나도 구동되지 않았다. 드물지만 이런 현상이 나타날 수 있다.
그러나 지속적으로 0이 나온다면 알고리즘을 수정할 필요가 있다.
스레드가 출력한 소수의 개수가 일치하는지 아래 값과 확인한다.....PASSED
T0(2), T1(3), T2(1), T3(1), T4(5), T5(3), T6(1), T7(2)
[T0] 1152921500311879687
[T1] 1152921500311879789
[T3] 1152921500311880077
[T7] 1152921500311880449
[T5] 1152921500311880203
T2 1152921500311879979
T611152921500311880357
T4 1152921500311880111
[T0] 1152921500311879759
T1 1152921500311879841
[T7] 1152921500311880461
[T5] 1152921500311880237
[T10] 1152921500311880707
[T11] 1152921500311880797
[T8] 1152921500311880531
[T4] 1152921500311880113
[T1] 1152921500311879853
T13 1152921500311881029
[T12] 1152921500311880977
[T5] 1152921500311880251
[T15] 1152921500311881227
[T11] 1152921500311880839
[T8] 1152921500311880573
[T4] 1152921500311880119
T13 1152921500311881049
```

```
[T15]1152921500311881253
[T11] 1152921500311880867
[T4] 1152921500311880171
[T13] 1152921500311881071
[T15]1152921500311881269
[T4] 1152921500311880177
소수 31개를 모두 찾았다.
스레드가 출력한 소수의 개수가 일치하는지 아래 값과 확인한다.....PASSED
T0(2), T1(3), T2(1), T3(1), T4(5), T5(3), T6(1), T7(2)
T8(2), T9(0), T10(1), T11(3), T12(1), T13(3), T14(0), T15(3)
--- 무작위 검증 ---
{0}{1}{2}...{3}..{4}{5}{6}..{7}{8}{9}..{10}{11}..{12}{13}{14}...{15}{16}
{17}.{18}.{19}.{20}{21}..{22}{23}{24}{25}{26}...{27}.{28}{29}.{30}.
{31}{32}{33}{34}{35}.{36}.{37}{38}{39}{40}{41}{42}{43}{44}{45}.{46}
{47}{48}.{49}{50}{51}{52}{53}.{54}{55}{56}{57}{58}.{59}.{60}{61}.
{62}.{63}{64}.{65}..{66}{67}{68}{69}{70}{71}{72}{73}{74}{75}.{76}
{77}.{78}{79}.{80}{81}{82}{83}{84}.{85}{86}{87}.{88}{89}{90}{91}
{92}.{93}{94}{95}{96}{97}{98}{99}{100}{101}{102}{103}...{104}..{105}
{106}{107}.{108}.{109}.{110}{111}{112}{113}..{114}{115}.{116}{117}.
{118}.{119}{120}{121}{122}{123}{124}.{125}{126}{127}.{128}{129}{130}
{131}{132}{133}{134}{135}{136}{137}.{138}{139}.{140}.{141}.{142}
{143}{144}..{145}{146}.{147}{148}.{149}{150}{151}.{152}{153}{154}
{155}...{156}{157}{158}{159}{160}{161}{162}{163}{164}{165}{166}{167}
{168}.{169}..{170}{171}{172}.{173}{174}.{175}.{176}{177}{178}{179}
{180}{181}{182}{183}{184}{185}.{186}{187}{188}.{189}.{190}{191}.
{192}..{193}{194}{195}.{196}{197}{198}{199}{200}.{201}.{202}.{203}.
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{227}.{228}.{229}{230}{231}{232}..{233}{234}{235}.{236}{237}{238}
{239}{240}{241}.{242}{243}{244}{245}.{246}{247}{248}{249}{250}{251}
{252}{253}...{254}..{255}..{256}{257}{258}{259}{260}{261}{262}{263}..
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{312}{313}{314}{315}.{316}{317}.{318}{319}.{320}.{321}.{322}{323}
{324}.{325}{326}{327}{328}.{329}{330}{331}.{332}.{333}.{334}{335}
{336}{337}{338}{339}{340}{341}{342}.{343}{344}..{345}{346}{347}{348}
{349}{350}.{351}{352}{353}{354}{355}.{356}.{357}..{358}{359}.{360}
{361}{362}.{363}{364}{365}.{366}.{367}{368}{369}{370}..{371}{372}
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{923}{924}{925}{926}{927}..{928}{929}{930}.{931}{932}{933}{934}{935}
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{997}.{998}.{999}{1000}{1001}{1002}.{1003}..{1004}{1005}{1006}.
{1007}{1008}{1009}.{1010}{1011}{1012}{1013}.{1014}.{1015}{1016}
{1017}..{1018}{1019}.{1020}{1021}{1022}{1023}.....PASSED
--- 교차 검증 ---
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[1020].[1021][1022].[1023]......PASSED
총 실행시간: 142.0268초
dad@Jayui-MacBookPro-i5 Solution % clear
dad@Jayui-MacBookPro-i5 Solution % ./client
--- 스레드풀 파라미터 한계 검증 ---
pthreaad_pool_init(): 일꾼 스레드 최대 수 초과....PASSED
pthreaad_pool_init(): 대기열 최대 용량 초과.....PASSED
--- 스레드풀 최기화와 종료 검증 ---
pthread_pool_init(): 완료.....PASSED
pthread_pool_shutdown(): 완료.....PASSED
pthread_pool_init(): 완료.....PASSED
pthread_pool_shutdown(): 완료.....PASSED
--- 스레드풀 기본 동작 검증 ---
<11><2><3><4><5><6><7><8><9><10><12><13><14><1><0><15><16><17><18><3
0><31><33><34><35><20><22><23><24><25><26><21><28><29><32><27><19><3</pre>
6><47><48><49><50><51><52><53><54><55><56><57><58><59><37><38><40><4
2><41><43><44><45><46><60><39><61><62><63>[0][1][2][3][4][5][6][7]
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[43] [44] [45] [46] [47] [48] [49] [50] [51] [52] [53] [40] . . . . . . PASSED
--- 스레드풀 종료 방식 검증 ---
[T0] 1152921500311879687
[T0] 1152921500311879759
소수 2개를 찾았다.
일부 일꾼 스레드가 구동되기 전에 풀이 종료되었다. 오류는 아니다.
스레드가 출력한 소수의 개수가 일치하는지 아래 값과 확인한다.....PASSED
T0(2), T1(3), T2(1), T3(1), T4(5), T5(3), T6(1), T7(2)
[T0] 1152921500311879687
[T3] 1152921500311880077
[T1] 1152921500311879789
[T7] 1152921500311880449
[T5] 1152921500311880203
[T2] 1152921500311879979
[T6] 1152921500311880357
[T4] 1152921500311880111
T0 1152921500311879759
[T1] 1152921500311879841
[T7] 1152921500311880461
[T5] 1152921500311880237
[T10] 1152921500311880707
[T11] 1152921500311880797
[T8] 1152921500311880531
[T4] 1152921500311880113
[T1] 1152921500311879853
[T13]1152921500311881029
T12 1152921500311880977
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T5 1152921500311880251
[T15] 1152921500311881227
[T11] 1152921500311880839
[T8] 1152921500311880573
T4 1152921500311880119
[T13] 1152921500311881049
[T15]1152921500311881253
[T11] 1152921500311880867
T4 1152921500311880171
[T13] 1152921500311881071
[T15] 1152921500311881269
[T4] 1152921500311880177
소수 31개를 모두 찾았다.
스레드가 출력한 소수의 개수가 일치하는지 아래 값과 확인한다.....PASSED
T0(2), T1(3), T2(1), T3(1), T4(5), T5(3), T6(1), T7(2)
T8(2), T9(0), T10(1), T11(3), T12(1), T13(3), T14(0), T15(3)
--- 무작위 검증 ---
{0}{1}{2}.{3}{4}{5}.{6}{7}{8}.{9}{10}.{11}{12}{13}{14}{15}{16}{17}..
{18}{19}..{20}{21}{22}{23}{24}{25}{26}.{27}..{28}.{29}.{30}{31}{32}.
{33}{34}.{35}{36}{37}{38}.{39}.{40}{41}.{42}.{43}{44}.{45}{46}{47}.
{48}.{49}{50}.{51}{52}.{53}{54}{55}{56}{57}{58}{59}.{60}{61}{62}
{63}.{64}{65}{66}{67}{68}{69}{70}{71}{72}.{73}.{74}{75}{76}.{77}.
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{91}.{92}{93}{94}{95}{96}{97}..{98}{99}{100}{101}.{102}.{103}
{104}...{105}.{106}{107}{108}{109}..{110}{111}.{112}{113}{114}{115}
{116}{117}{118}{119}.{120}{121}{122}.{123}{124}{125}{126}.{127}.
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{141}.{142}{143}.{144}{145}{146}{147}{148}{149}{150}{151}{152}{153}
{154}...{155}{156}{157}{158}.{159}.{160}.{161}{162}{163}{164}.{165}.
{166}{167}{168}{169}{170}{171}.{172}{173}{174}{175}{176}{177}{178}
{179}{180}.{181}{182}{183}{184}{185}{186}{187}{188}{189}{190}{191}
{192}{193}.{194}{195}.{196}{197}{198}{199}{200}{201}{202}{203}
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