```
1  /*EE231002 Lab03. Balanced Prime Number
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4  */
5  #include<stdio.h>
6
7  int main(void)
8  {
9      int bpn = 1, pn_a = 100, pn_b = 101, pn_c = 105;//bal_prime_num,3 temp num

10     int pn, j, stop;                                //find prime_num, varivable
   s
11                    Is this loop necessary?
12     while(bpn <= 1000){                             //1000 bal_prime_numb
13        for (pn = 3 ; bpn <= 1000 ; pn = pn + 2){   //find prime from 3, ++2
14           stop = 0;                             //a variable to stop loop
15           if(pn_a<=10000){                //when prime numbers less than 1000
   0
16              for (j = 3 ; j < pn/2 && stop == 0 ; j = j + 2){//test from 3 t
   o pn/2   Lin too long.
17                 if ( pn%j == 0 ){                              //wrong, no
   t prime
18                    stop = 1;                               //exit the
   loop
19                 }
20              }
21              if ( stop == 0 ){                  //if find a new prime numbe
   r
22                 pn_a = pn_b;                   //three temporary prime number,
    a<b<c
23                 pn_b = pn_c;
24                 pn_c = pn;
25                 if ( pn_b == (pn_a + pn_c)/2){  //if prime_number_b is bal_
   prime_num
26                    if ( bpn <= 10 || bpn > 990 ){  //print from 1 to 10, 9
   91 to 1000
27                       printf("Balanced Prime Number #%d: %d\n", bpn, pn_b
   );
28                    }
29                    bpn++;                       //# of balanced_prime_numbe
   r
30                 }
31              }
32           }
33           if(pn_a<=1000000&&pn_a>10000){          //when prime number >10000
34              for (j = 3 ; j < 1000 && stop == 0 ; j = j + 2){    //test from
    3 to 1000
35                 if ( pn%j == 0 ){                              //wrong, no
   t prime num
36                    stop = 1;                               //exit the
```

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                loop
37                          }
38                      }
39                  if ( stop == 0 ){                        //if find a new prime n
   umber
40                      pn_a = pn_b;                          //three temp prime numb
   er, a<b<c
41                      pn_b = pn_c;
42                      pn_c = pn;
43                      if ( pn_b == (pn_a + pn_c)/2){  //if prime_num_b is the bal
   _prime_num
44                          if ( bpn <= 10 || bpn > 990 ){  //print from 1 to 10, 9
   91 to 1000
45                              printf("Balanced Prime Number #%d: %d\n", bpn, pn_b
   );
46                          }
47                          bpn++;                            //# of balanced_prime_n
   umber
48                      }
49                  }
50              }
51          }
52      }
53      return 0;
54 }
```

Score: 79
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o. cpu time: 0.075s
o. Loop on line 12, is it really necessary?
o. Loop on line 16 can be more efficient
o. 'if' statements on lines 15 and 33, are these really necessary?
o. Each line should not have more than 80 characters.
o. Can use space characters more effectively.