

```
1  #include <stdio.h>
2  #include <stdarg.h>
3
4  #define NUM_TO_BE_FOUND 3
5  #define NUM_ELEMENTS 10
6
7  int main(void)
8  {
9      // function prototypes
10     void FindNumber(int, int, ...);
11
12     // code
13     printf("\n\n");
14
15     FindNumber(NUM_TO_BE_FOUND, NUM_ELEMENTS, 3, 5, 9, 2, 3, 6, 9, 3, 1, 3);
16
17     return(0);
18 }
19
20 void FindNumber(int num_to_be_found, int num, ...) // VARIADIC FUNCTION
21 {
22     // function prototypes
23     int va_FindNumber(int, int, va_list);
24
25     // variable declarations
26     int count = 0;
27     int n;
28     va_list numbers_list;
29
30     // code
31     va_start(numbers_list, num);
32
33     count = va_FindNumber(num_to_be_found, num, numbers_list);
34
35     if(count == 0)
36         printf("Number %d Could Not Be Found !!!\n\n", num_to_be_found);
37     else
38         printf("Number %d Found %d Times !!!\n\n", num_to_be_found, count);
39
40     va_end(numbers_list);
41 }
42
43 int va_FindNumber(int num_to_be_found, int num, va_list list)
44 {
45     // variable declarations
46     int count_of_num = 0;
47     int n;
48
49     // code
50     while(num)
51     {
52         n = va_arg(list, int);
```

```
53         if(n == num_to_be_found)
54             count_of_num++;
55         num--;
56     }
57
58     return(count_of_num);
59 }
60
61
```