

```
1 #include <stdio.h>
2 #include <stdarg.h>
3
4 int main(void)
5 {
6     // function prototypes
7     int CalculateSum(int, ...);
8
9     // variable declarations
10    int answer;
11
12    // code
13    printf("\n\n");
14
15    answer = CalculateSum(5, 10, 20, 30, 40, 50);
16    printf("Answer = %d\n\n", answer);
17
18    answer = CalculateSum(10, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1);
19    printf("Answer = %d\n\n", answer);
20
21    answer = CalculateSum(0);
22    printf("Answer = %d\n\n", answer);
23
24    return(0);
25 }
26
27 int CalculateSum(int num, ...) // VARIADIC FUNCTION
28 {
29     // variable declarations
30     int sum_total = 0;
31     int n;
32
33     va_list numbers_list;
34
35     // code
36     va_start(numbers_list, num);
37
38     while(num)
39     {
40         n = va_arg(numbers_list, int);
41         sum_total = sum_total + n;
42         num--;
43     }
44
45     va_end(numbers_list);
46     return(sum_total);
47 }
48
49
```

---

```
53     {
54         n = va_arg(list, int);
55         sum_total = sum_total + n;
56         num--;
57     }
58
59     return(sum_total);
60 }
61
62
```