

unit2\midterm_code1.c

```
1  #include <stdio.h>
2
3  // c function to take a number and sum all digits?
4  int sum_digits(int n);
5
6  void main(void)
7  {
8      int num;
9      printf("enter a number: ");
10     scanf("%d", &num);
11
12     printf("\nsum of %d digits = %d", num, sum_digits(num));
13 }
14 int sum_digits(int n)
15 {
16     static int add;
17     int rem = 0;
18     if (n != 0)
19     {
20         rem = n % 10;
21         add += rem;
22
23         sum_digits(n / 10);
24     }
25     else
26         return 0;
27     return add;
28 }
29
```