

SUM-OF-DIGITS.CPP source

```
01:
02:  /* Program to input a number and find the sum of its digits */
03:
04:  #include<iostream>
05:  using namespace std;
06:
07:  int main() {
08:
09:      int number, sum_of_digits=0;
10:
11:      cout<<"Enter a number:";
12:      cin>>number;
13:
14:      // The content of the loop will be
15:      // executed as long as number > 0
16:      while(number>0) {
17:          //add the 1's digit of the number to sum_of_digits
18:          //trick: division by 10 and take remainder gives 1's digit
19:          sum_of_digits+=number%10;
20:          //divide number by 10 (ignore decimals. ie integer division)
21:          //so the 10's place will become 1's place
22:          //100's place -> 10's place and so on.
23:          number/=10;
24:      }
25:
26:      cout<<"Sum of digits:"<<sum_of_digits<<endl;
27:
28:      return 0;
29:  }
30:
31:
```

SUM-OF-DIGITS.CPP output

```
1: Enter a number:1234
2: Sum of digits:10
3:
```