The Virtual Learning Environment for Computer Programming

# Sum of even digits

X20570\_en

We are asked to provide a RECURSIVE implementation for the function:

```
// Pre: n >= 0
// Post: returns the sum of n's even digits
int even_digits(int n) {
    // ...
}
```

where given a natural number n it returns the sum of its even digits. For example, if n equals 614, the function returns 10 since 6 + 4 = 10.

Use the following main program to test your function.

```
int main() {
   int x;
   while (cin >> x) cout << even_digits(x) << endl;
}</pre>
```

**Exam score:** 1.000000 **Automatic part:** 40.000000%

## Input

The input is a sequence of natural numbers.

## Output

For each number, the program writes the sum of its even digits.

Sample input	Sample output
614	10
0	0
1579	0
246	12
2579	2
5792	2
7	0
2	2
765443	14

#### Observation

A non recursive implementation of function even\_digits (i.e., using while or for instructions) will be considered invalid.

#### **Problem information**

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