

Answer on Question #47578, Programming, C++

Problem.

9. Write a program that accepts a number and outputs its equivalent in words:

Sample input/output dialogue:

Enter number: 1380

One thousand three hundred eighty

In Switch Case

Solution.

Code

```
#include <iostream>
#include <string>

using namespace std;

// Converts two digits number to word
string twoDigits(long number) {
    string word = "";
    long unit = number % 10;
    long ten = (number / 10) % 10;
    if ((10 <= number) && (number < 20)) {
        switch (number) {
            case 10: word += "ten "; break;
            case 11: word += "eleven "; break;
            case 12: word += "twelve "; break;
            case 13: word += "thirteen "; break;
            case 14: word += "fourteen "; break;
            case 15: word += "fifteen "; break;
            case 16: word += "sixteen "; break;
            case 17: word += "seventeen "; break;
            case 18: word += "eighteen "; break;
            case 19: word += "nineteen "; break;
        }
    } else {
        switch (ten) {
            case 2: word += "twenty "; break;
            case 3: word += "thirty "; break;
            case 4: word += "forty "; break;
            case 5: word += "fifty "; break;
            case 6: word += "sixty "; break;
            case 7: word += "seventy "; break;
            case 8: word += "eighty "; break;
            case 9: word += "ninety "; break;
        }
        switch (unit) {
            case 1: word += "one "; break;
            case 2: word += "two "; break;
            case 3: word += "three "; break;
            case 4: word += "four "; break;
            case 5: word += "five "; break;
            case 6: word += "six "; break;
            case 7: word += "seven "; break;
            case 8: word += "eight "; break;
            case 9: word += "nine "; break;
        }
    }

    return word;
}

// Converts to three digits number to word
string threeDigits(long number) {
    string word = "";
```

```

long residue = number % 100;
long hundred = number / 100;
switch (hundred) {
    case 1: word += "one hundred "; break;
    case 2: word += "two hundred "; break;
    case 3: word += "three hundred "; break;
    case 4: word += "four hundred "; break;
    case 5: word += "five hundred "; break;
    case 6: word += "six hundred "; break;
    case 7: word += "seven hundred "; break;
    case 8: word += "eight hundred "; break;
    case 9: word += "nine hundred "; break;
}
word += twoDigits(residue);

return word;
}

// Converts nine digits number to word
string nineDigits(long number) {
    string word = "";
    long hundred = number % 1000;
    long thousand = (number % 1000000) / 1000;
    long million = number / 1000000;

    if (million != 0) {
        word += threeDigits(million) + "million ";
    }

    if (thousand != 0) {
        word += threeDigits(thousand) + "thousand ";
    }

    if (hundred != 0) {
        word += threeDigits(hundred);
    }

    return word;
}

int main() {
    // Input/Output
    long number;
    cin >> number;
    cout << nineDigits(number);
    return 0;
}

```

Result

1380

one thousand three hundred eighty