```cpp
1: #include <iostream>
2: using namespace std;
3:
4: int main(){
5:
6:     int num, sum = 0, digit;
7:
8:     cout << "Enter an integer number: ";
9:     cin >> num;
10:
11:     do{
12:         digit = num % 10;
13:         cout << digit;
14:         sum = sum + digit;
15:         num = num / 10;
16:         if (num > 0){
17:             cout << " + ";
18:         }
19:     }while (num > 0);
20:
21:     cout << " = " << sum << endl;
22:
23:     if ((sum % 3 == 0)&&(sum % 4 == 0)&&(sum % 5 == 0)){
24:         cout << sum << " is multiples of 3, 4 and 5";
25:     }else if ((sum % 4 == 0)&&(sum % 5 == 0)){
26:         cout << sum << " is multiples of 4 and 5";
27:     }else if ((sum % 3 == 0)&&(sum % 5 == 0)){
28:         cout << sum << " is multiples of 3 and 5";
29:     }else if ((sum % 3 == 0)&&(sum % 4 == 0)){
30:         cout << sum << " is multiples of 3 and 4";
31:     }else if (sum % 5 == 0){
32:         cout << sum << " is multiples of 5";
33:     }else if (sum % 4 == 0){
34:         cout << sum << " is multiples of 4";
35:     }else if (sum % 3 == 0){
36:         cout << sum << " is multiples of 3";
37:     }else{
38:         cout << sum << " is not multiples of 3, 4 or 5";
39:     }
40:
41:     return 0;
42: }
```