TP 1 - Partie 1 - Exercice 4 - I

```cpp
#include <cmath>
#include <iostream>
#include <limits>

int main() {
  while (true) {
    std::cout << "Please enter a decimal number: ";
    double x;
    std::cin >> x;
    if (x < 0) {
      std::cout << "A positive one!\n";
      continue;
    }
    // Be careful not to fall into undefined behavior.
    if (x > std::numeric_limits<long int>::max()) {
      std::cout << "A not so high one!\n";
      continue;
    }
    // When converting to long int, the decimal gets lost.
```

TP 1 - Partie 1 - Exercice 4 - II

```
20      std::cout << "The nearest integer to " << x << " is "
21                << ((x - static_cast<long int>(x) <= .5)
22                        ? static_cast<long int>(x)
23                        : static_cast<long int>(x) + 1)
24                << ".\n";
25      std::cout << "The nearest integer to " << x << " is " << std::round(x)
26                << ".\n";
27    }
28    return 0;
29  }
```