# Range-based loop

Because iterating over the elements of arrays is so common, there is a short cut know as the **range-based loop**, its name comes from the idea that the loop will integrate over a range of values. The range may be an array, vector or other container that has a sequence of elements.

|  |
| --- |
| #include <iostream>  #include <array>  using namespace std;  const int ARRAY\_SIZE = 4; // constant for size  int main() {   array<double, ARRAY\_SIZE> ratings = {4.9, 4.8, 4.9, 5.4};   for (double rating: ratings) {    cout << rating << endl;   }    return 0;  } |

Range-based loops are a clean way iterate a loop when subscripts (indexes) are not needed. If you are are using subscripts as part of the information, such as an id number, in conjunction with another parallel array, you are better off with the counting for loop like in the previous example.