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/* The following code example is taken from the book
 * "The C++ Standard Library – A Tutorial and Reference, 2nd Edition"
 * by Nicolai M. Josuttis, Addison-Wesley, 2012
 *
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 */
#include <iostream>
#include <sstream>
#include <string>
#include <tuple>
#include <utility>
using namespace std;

tuple<string, string, string> parseName(string name)
{
    string s1, s2, s3;
    istringstream(name) >> s1 >> s2 >> s3;
    if (s3.empty()) {
        return tuple<string, string, string>(move(s1), "", move(s2));
    }
    else {
        return tuple<string, string, string>(move(s1), move(s2), move(s3));
    }
}

int main()
{
    auto t1 = parseName("Nicolai M. Josuttis");
    cout << "firstname: " << get<0>(t1) << endl;
    cout << "middle:    " << get<1>(t1) << endl;
    cout << "lastname:   " << get<2>(t1) << endl;
    auto t2 = parseName("Nico Josuttis");
    cout << "firstname: " << get<0>(t2) << endl;
    cout << "middle:    " << get<1>(t2) << endl;
    cout << "lastname:   " << get<2>(t2) << endl;
}

```