|  |
| --- |
| #include <iostream> |
|  |

|  |
| --- |
| using namespace std; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| // =================================== T A S K 1 =================================== |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| typedef unsigned char day; |
|  |

|  |
| --- |
| typedef unsigned char month; |
|  |

|  |
| --- |
| typedef unsigned char year; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| struct Date |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| day dd; |
|  |

|  |
| --- |
| month mm; |
|  |

|  |
| --- |
| year yyyy; |
|  |

|  |
| --- |
| friend bool operator> (const Date& date1, const Date& date2); |
|  |

|  |
| --- |
| friend bool operator< (const Date& date1, const Date& date2); |
|  |

|  |
| --- |
| friend bool operator== (const Date& date1, const Date& date2); |
|  |

|  |
| --- |
| }; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator> (const Date& date1, const Date& date2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| if (date1.yyyy > date2.yyyy) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (date1.yyyy == date2.yyyy && date1.mm > date2.mm) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (date1.yyyy == date2.yyyy && date1.mm == date2.mm && date1.dd > date2.dd) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator< (const Date& date1, const Date& date2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| if (date1.yyyy < date2.yyyy) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (date1.yyyy == date2.yyyy && date1.mm < date2.mm) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else if (date1.yyyy == date2.yyyy && date1.mm == date2.mm && date1.dd < date2.dd) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator== (const Date& date1, const Date& date2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| if (date1.yyyy == date2.yyyy && date1.mm == date2.mm && date1.dd == date2.dd) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
|  |
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| --- |
|  |
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|  |
| --- |
| // =================================== T A S K 2 =================================== |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| struct Country |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| string name; |
|  |

|  |
| --- |
| int area; |
|  |

|  |
| --- |
| int population; |
|  |

|  |
| --- |
| }; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator> (const Country& country1, const Country& country2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| if (country1.area > country2.area && country1.population > country2.population) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator< (const Country& country1, const Country& country2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| if (country1.area < country2.area && country1.population < country2.population) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| return true; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
| else return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator>> (const Country& country1, const Country& country2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| int density1 = country1.population / country1.area; |
|  |

|  |
| --- |
| int density2 = country2.population / country2.area; |
|  |

|  |
| --- |
| if (density1 > density2) return true; |
|  |

|  |
| --- |
| else return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| bool operator<< (const Country& country1, const Country& country2) |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| int density1 = country1.population / country1.area; |
|  |

|  |
| --- |
| int density2 = country2.population / country2.area; |
|  |

|  |
| --- |
| if (density1 < density2) return true; |
|  |

|  |
| --- |
| else return false; |
|  |

|  |
| --- |
| } |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| int main() |
|  |

|  |
| --- |
| { |
|  |

|  |
| --- |
| setlocale(LC\_ALL, "ru"); |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| Date date1 = { 7, 1, 1980 }; |
|  |

|  |
| --- |
| Date date2 = { 7, 2, 1993 }; |
|  |

|  |
| --- |
| Date date3 = { 7, 1, 1980 }; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| if (date1 < date2) cout << "1) true\n"; |
|  |

|  |
| --- |
| else cout << "1) false\n"; |
|  |

|  |
| --- |
| if (date1 > date2) cout << "2) true\n"; |
|  |

|  |
| --- |
| else cout << "2) false\n"; |
|  |

|  |
| --- |
| if (date1 == date2) cout << "3) true\n"; |
|  |

|  |
| --- |
| else cout << "3) false\n"; |
|  |

|  |
| --- |
| if (date1 == date3) cout << "4) true\n"; |
|  |

|  |
| --- |
| else cout << "4) false\n"; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
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|  |
| --- |
|  |
|  |

|  |
| --- |
| Country Belarus = { "Belarus", 207600, 9408400 }; |
|  |

|  |
| --- |
| Country Poland = { "Poland", 312696, 38268000 }; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| if (Belarus > Poland) cout << "Население и площадь Беларуси больше населения и площади Польши.\n"; |
|  |

|  |
| --- |
| else cout << "Население и площадь Польши больше населения и площади Беларуси.\n"; |
|  |

|  |
| --- |
|  |
|  |

|  |
| --- |
| if (Belarus >> Poland) cout << "Плотность населения Беларуси больше плотности населения Польши.\n"; |
|  |

|  |
| --- |
| else cout << "Плотность населения Польши больше плотности населения Беларуси.\n"; |
|  |

}