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#include using namespace std; class Tool { protected: int strength; char type; public: void setStrength(int s) { strength = s; } bool fight(Tool other) { if (type == 'r') { // Rock if (other.type == 's') // Scissors return strength * 2 > other.strength; else // Paper return strength / 2 > other.strength; } else if (type == 'p') { // Paper if (other.type == 'r') // Rock return strength * 2 > other.strength; else // Scissors return strength / 2 > other.strength; } else if (type == 's') { // Scissors if (other.type == 'p') // Paper return strength * 2 > other.strength; else // Rock return strength / 2 > other.strength; } return false; // Invalid type } }; class Rock : public Tool { public: Rock(int s) { setStrength(s); type = 'r'; } }; class Paper : public Tool { public: Paper(int s) { setStrength(s); type = 'p'; } }; class Scissors : public Tool { public: Scissors(int s) { setStrength(s); type = 's'; } }; int main() { Scissors s1(5); Paper p1(7); Rock r1(15); cout << s1.fight(p1) << p1.fight(s1) << endl; cout << p1.fight(r1) << r1.fight(p1) << endl; cout << r1.fight(s1) << s1.fight(r1) << endl; return 0; }
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