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//April 9th, 2020
//Int 5
//Enloe HS
//Contest #4
import java.io.File;
import java.io.FileNotFoundException;
import java.util.ArrayList;
import java.util.Collections;
import java.util.Scanner;

public class Main {
    static ArrayList<Integer> opponent = new ArrayList<Integer>();
    static ArrayList<Integer> me = new ArrayList<Integer>();
    static ArrayList<Integer> rolls = new ArrayList<Integer>();

    private static int getIndexOfLowest() {
        int lowest = Integer.MAX_VALUE;
        int index = 0;
        for (int i = 0; i < me.size(); i++) {
            if (me.get(i) < lowest) {
                lowest = me.get(i);
                index = i;
            }
        }
        return index;
    }

    private static boolean isPrime(int n) {
        for (int i = 2; i <= (int) Math.sqrt(n); i++) {
            if (n % i == 0)
                return false;
        }
        return true;
    }

    private static Boolean isOccupied(int n) {
        for (int i : me) {
            if (i == n) {
                return true;
            }
        }
        for (int i : opponent) {
            if (i == n) {
                return true;
            }
        }
    }
}

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    }
}
return false;
}

private static void move(int index, int roll) {
    int prevpos = me.get(index);
    int newpos = prevpos;

    if (isOccupied(prevpos + roll)) {
        return;
    } else if (!isOccupied(prevpos + roll)) {
        newpos = prevpos + roll;
        me.set(index, newpos);
    }

    if (newpos == 52) {
        me.remove(index);
        return;
    }
    if (newpos > 52) {
        newpos = prevpos;
        me.set(index, newpos);
        return;
    }

    if (isPrime(newpos)) {
        for (int i = 1; i <= 6; i++) {
            if (isOccupied(newpos + i)) {
                newpos = newpos + i - 1;
                me.set(index, newpos);
                return;
            }
        }
        newpos = newpos + 6;
        me.set(index, newpos);
        return;
    }

    if (Math.sqrt(newpos) == Math.floor(Math.sqrt(newpos)) && newpos > 4) {
        for (int i = 1; i <= 6; i++) {
            if (isOccupied(newpos - i)) {
                newpos = newpos - i + 1;
                me.set(index, newpos);
                return;
            }
        }
    }
}

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    }
}
newpos = newpos - 6;
me.set(index, newpos);
return;
}
if (madeCornerMove(prevpos, roll, newpos)) {
me.set(index, prevpos);
for (int i = 1; i <= roll; i++) {
    if ((prevpos + i) % roll == 0 && !isOccupied(prevpos + i)) {
        newpos = prevpos + i;
        me.set(index, newpos);
        return;
    }
}
newpos = prevpos;
me.set(index, newpos);
return;
}
}
}

private static boolean madeCornerMove(int prevpos, int roll, int newpos) {
int[] corners = { 7, 12, 17, 22, 27, 35, 40, 45, 50 };
for (int i : corners) {
    if (prevpos < i && newpos > i) {
        return true;
    }
}
return false;
}

public static void main(String args[]) throws FileNotFoundException {
File myfile = new File("int.txt");
Scanner myscanner = new Scanner(myfile);
for (int i = 0; i < 5; i++) {
me.clear();
opponent.clear();
rolls.clear();
String inString = myscanner.nextLine().trim();
String[] splited = inString.split("\\s+");
int count = 0;
for (String n : splited) {
    if (count < 3) {
        opponent.add(Integer.parseInt(n));
    } else if (count < 6) {

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        me.add(Integer.parseInt(n));
    } else if (count != 6) {
        rolls.add(Integer.parseInt(n));
    }
    count++;
}
for (int j : rolls) {
    int index = getIndexOfLowest();
    move(index, j);
}
if(!me.isEmpty()){
Collections.sort(me);
for (int j : me) {
    System.out.print(j + " ");
}}
else{
    System.out.print("GAMEOVER");
}
System.out.println();
}
}
}
```