

```
package player.playeragent;

import edu.neu.ccs.demeterf.demfgen.lib.*;
import edu.neu.ccs.demeterf.*;
import edu.neu.ccs.evergreen.ir.Relation;
import gen.*;

public class Shannon extends Bc
{
    Constraint combine(Constraint c, Weight w, RelationNr r, List<Variable> lv, Literal l)
    {
        if (lv.contains(l.var))
        {
            int index = lv.index(l.var);
            Relation toReduce = new Relation(3, r.v);
            int relation = toReduce.reduce(index, l.value.sign());
            return new Constraint(w, new RelationNr(relation), lv);
        }
        else
        {
            return new Constraint(w, r, lv);
        }
    }

    static RawMaterial shannon(RawMaterial c, Literal l)
    {
        return new Traversal (new Shannon()).<RawMaterial>traverse(c, l);
    }
}
```