

## Synthesized solution for benchmark 01loopprint.c

```

solution
├── (Complete), cond:  a > 5
│   ├── {
│   │   Cond : c17
│   │   k1 = ((a5 ∨ b6) · ()) = printf(i, j);
│   │   i = i + .i, ?1; j = j + .i, ?1; ) * (¬a5 ∧ ¬b6)
│   │   k2 = ((a13 ∨ b14) · a = i + .i, ?j; ()) = printf(i, j);
│   │   i = i + .i, ?1; j = j + .i, ?1; (c17 · fv.1 = 0; ()) = printf(a, fv.1); +¬c17 · 1)) * (¬a13 ∧ ¬b14)
│   │   └── AComplete
│   │       ├── {
│   │       │   Axioms : {D = 1, E = 1, G = 1}
│   │       │   k1 = ((a5 ∨ b6) · ()) = printf(i, j);
│   │       │   i = i + .i, ?1; j = j + .i, ?1; ) * (¬a5 ∧ ¬b6)
│   │       │   k2 = ((a13 ∨ b14) · a = i + .i, ?j; ()) = printf(i, j);
│   │       │   i = i + .i, ?1; j = j + .i, ?1; 1 · fv.1 = 0; ()) = printf(a, fv.1); ) * (¬a13 ∧ ¬b14)
│   │       └── {
│   │       │   Cond : ¬c17
│   │       │   k1 = ((a5 ∨ b6) · ()) = printf(i, j);
│   │       │   i = i + .i, ?1; j = j + .i, ?1; ) * (¬a5 ∧ ¬b6)
│   │       │   k2 = ((a13 ∨ b14) · a = i + .i, ?j; ()) = printf(i, j);
│   │       │   i = i + .i, ?1; j = j + .i, ?1; (c17 · fv.1 = 0; ()) = printf(a, fv.1); +¬c17 · 1)) * (¬a13 ∧ ¬b14)
│   │       └── AComplete
│   │           ├── {
│   │           │   Axioms : {D = 1}
│   │           │   k1 = ((a5 ∨ b6) · ()) = printf(i, j);
│   │           │   i = i + .i, ?1; j = j + .i, ?1; ) * (¬a5 ∧ ¬b6)
│   │           │   k2 = ((a13 ∨ b14) · a = i + .i, ?j; ()) = printf(i, j);
│   │           │   i = i + .i, ?1; j = j + .i, ?1; 1 · 1) * (¬a13 ∧ ¬b14)
│   │           └── {

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Remaining 10 solutions omitted for brevity.