```
bool f(bool x0, bool x1, bool x2, bool x3, bool x4)
{ bool a1 = x0 && ! x1 && ! x2;
  bool a2 = ! x0 && x1 && x2;
  bool a3 = x2 && ! x3;
  bool a4 = x3 && ! x2;
  bool a5 = a1 && ! a3 && ! a2 && x4;
  bool a6 = ! a3 && ! a1 && ! a4 && ! x4;
  bool a7 = ! a5 && a6;
  bool a8 = a5 && ! a6;
  bool a9 = ! a7 && a8;
  return a9; }
```

to solve non-deterministically:

```
{ bool x0, x1, x2, x3, x4;
  CHOOSE x0 = true; OR x0 = false;
  CHOOSE x1 = true; OR x1 = false;
  CHOOSE x2 = true; OR x2 = false;
  CHOOSE x3 = true; OR x3 = false;
  CHOOSE x4 = true; OR x4 = false;
  if ( f(x0, x1, x2, x3, x4))
     SUCCESS;
  else
     FAIL; }
```

or

```
{ bool k0, k1, k2, k3, k4;
  if it is possible for f(true, x1, x2, x3, x4) to be true
    k0 = true;
  else
    k0 = false;
  if it is possible for f(k0, true, x2, x3, x4) to be true
    k1 = true;
  else
    k1 = false;
  if it is possible for f(k0, k1, true, x3, x4) to be true
    k2 = true;
  else
    k2 = false;
  // etc for k3 and k4
  if ( f(k0, k1, k2, k3, k4))
     SUCCESS;
  else
     FAIL; }
```