Give a step-by-step explanation of how EASYCRYPT processes the proof script ass0.ec—which is listed below. Hint: run this script, step-by-step in Emacs (using Proof General to interact with EASYCRYPT), and explain what is happening at each point in time as clearly as you can.

```
lemma negb_or (a b : bool) :
  !(a \ b) <=> !a /\ !b.
proof.
split.
move => not_or.
split.
case a.
move => a_true.
simplify.
have contrad : a \ b.
  left.
    trivial.
  trivial.
  trivial.
case b.
move => b_true.
simplify.
have contrad : a \ b.
  right.
    trivial.
  trivial.
  trivial.
move => and_not.
elim and_not => a_false b_false.
case (a \ b).
move => or.
elim or.
trivial.
trivial.
trivial.
qed.
```