CS357 Software Verification Lab 1

1. **Warming Up:**

Mary has a red hat with a feather, John has a blue hat without a feather, the hat that is hidden, is red and has a feather.

1. **The Connectives:**

Not more than one of them is dangerous

¬(A^B)

Both of them are dangerous.

(A^B)

Neither of them is dangerous.

¬A ^ ¬B

At least one of them is dangerous.

A v B v (A^B)

Either both or neither of them is dangerous.

(A^B) v (¬A^¬B)

Exactly one of them is dangerous.

(A^¬B) v (¬A^B)

1. **Conditionals:**

Either John doesn't play well, or he does and he wins.

(¬P) v (P ^ ¬W)

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| --- | --- | --- | --- | --- |
| P | W |  |  | P → W |