The test case application automatically generates table of tests. (Professor said this was fine just like this via email)

```
Test Case Phase 1: Testing for correctness

ID   Expression                                                        Expected  Result  Pas/Fail
0    (T | F) $ F                                                       true      true    Passed
1    ! (T & T)                                                         false     false   Passed
2    (F @ T) | (T @ F)                                                 true      true    Passed
3    (T $ T) & F                                                       false     false   Passed
4    ! F | ! T                                                         true      true    Passed
5    (((((T | F) & F) | (T & (T | F))) @ (T @ T)) $ (! (T | F)))       true      true    Passed
6    ((F $ ((T | F) & (F @ (T | F)))) | (T $ (T & F)))                 true      true    Passed
7    (((! (T $ F)) & (T @ T)) | ((F | T) & (T $ T)))                   false     false   Passed
8    (((T @ T) $ (F @ T)) | ((!T) & (T | (!T))))                       true      true    Passed
9    ((F @ T) $ (T | (F & F))) & (T & (T @ (!T)))                      false     false   Passed
10   F @ F                                                             true      true    Passed
11   F @ T                                                             true      true    Passed
12   T @ T                                                             false     false   Passed
13   T $ T                                                             false     false   Passed
14   F $ T                                                             true      true    Passed
15   F $ F                                                             false     false   Passed
16   T $ F                                                             true      true    Passed
17   !T                                                                false     false   Passed
18   !F                                                                true      true    Passed
19   (T & F) | !(F & T)                                                true      true    Passed
20   (T | F) & !(F | T)                                                false     false   Passed
21   !(T | F) $ !(F & T)                                               true      true    Passed
22   (T | F) @ !(T $ F)                                                true      true    Passed
23   !(T & F) $ !(T | F)                                               true      true    Passed
24   !(T | F) @ (T & F)                                                true      true    Passed
25   (T & F) | ((T | F) & !(F & T))                                    true      true    Passed
26   !(T $ F) @ !(T @ F)                                               true      true    Passed
27   !(T & F)                                                          true      true    Passed
28   T | F                                                             true      true    Passed
29   !(T | T)                                                          false     false   Passed
```

```
30   F & T                                                             false     false   Passed
31   T @ F                                                             true      true    Passed
32   !(T $ T)                                                          true      true    Passed
33   T | (F & T)                                                       true      true    Passed
34   (T @ F) | (T & F)                                                 true      true    Passed
35   (F & T) $ (T | F)                                                 true      true    Passed
36   !(T $ F)                                                          false     false   Passed
37   (T | F) & (T & F)                                                 false     false   Passed
38   !(F @ T)                                                          false     false   Passed
39   T & (F | T)                                                       true      true    Passed
40   !(T $ T)                                                          true      true    Passed
41   (F @ T) | (T $ F)                                                 true      true    Passed
42   !(T | F)                                                          false     false   Passed
43   (T & F) | (F @ T)                                                 true      true    Passed
44   !(T & T)                                                          false     false   Passed
45   (T $ F) & (F @ T)                                                 true      true    Passed
46   !(F & T)                                                          true      true    Passed
47   (T & F) & F @ T                                                   true      true    Passed
48   T & T                                                             true      true    Passed
49   T & F                                                             false     false   Passed
50   F & F                                                             false     false   Passed
51   F & T                                                             false     false   Passed
52   T | F                                                             true      true    Passed
53   T | T                                                             true      true    Passed
54   F | F                                                             false     false   Passed
55   F | T                                                             true      true    Passed
56 OUT OF 56 PASSED
enter to exit
```