**Лабораториска вежба 3А**

1. Find the predicates and their clauses

P = (age > 65 || isHighRisk) && weight < 50 && !hasAllergy

Clause 1: (age > 65 || isHighRisk)

Clause 1.1: age > 65

Clause 1.2: isHighRisk

Clause 2: weight < 50

Clause 3: hasAllergy

1. *Write the appropriate truth tables for the predicates expressed through the clauses, also determining for each clause whether it is active in each row.*

X: age > 65 | Y: isHighRisk | Z: weight < 50 | W: !hasAllergy

(X || Y) && Z && W

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| ***Row*** | ***X*** | ***Y*** | ***Z*** | ***W*** | ***P*** | ***X active*** | ***Y active*** | ***Z active*** | ***W active*** |
| **1** | T | T | T | T | **T** | F | F | T | T |
| **2** | T | T | T | F | **F** | F | F | F | T |
| **3** | T | T | F | T | **F** | F | F | T | F |
| **4** | T | T | F | F | **F** | F | F | F | F |
| **5** | T | F | T | T | **T** | T | F | T | T |
| **6** | T | F | T | F | **F** | F | F | F | T |
| **7** | T | F | F | T | **F** | F | F | T | F |
| **8** | T | F | F | F | **F** | F | F | F | F |
| **9** | F | T | T | T | **T** | F | T | T | T |
| **10** | F | T | T | F | **F** | F | F | F | T |
| **11** | F | T | F | T | **F** | F | F | T | F |
| **12** | F | T | F | F | **F** | F | F | F | F |
| **13** | F | F | T | T | **F** | T | T | F | F |
| **14** | F | F | T | F | **F** | F | F | F | F |
| **15** | F | F | F | T | **F** | F | F | F | F |
| **16** | F | F | F | F | **F** | F | F | F | F |

1. *Find TRs for the following coverage: GACC, RACC*

**GACC**

X: (5,13)

Y: (9,13)

Z: (1,3), (1,7), (1,11), (5,3), (5,7), (5,11), (9,3), (9,7), (9,11)

W: (1,2), (1,6), (1,10), (5,2), (5,6), (5,10), (9,2), (9,6), (9,10)

**RACC**

X: (5,13)

Y: (9,13)

Z: (1,3), (5,7), (9,11)

W: (1,2), (5,6), (9,10)