Lab1 - Ex1

```
(D^(A^B)) v (¬C^(A^B))
(D ^ A ^ B) V (¬C ^ A ^ B)
(A v (¬C ^ A ^ B)) ^ (B v (¬C ^ A ^ B)) ^ (D v (¬C ^ A ^ B))
(A v ¬C) ^ (A v A) ^ (A v B) ^ (B v ¬C) ^ (B v B) ^ (B v A) ^ (D v ¬C) ^ (D v A) ^ (D v B)

# (A v A) ~ A
# (A v B) ~ (B v A) -> pastram doar (A v B)

(A v !C) ^ A ^ (A v B) ^ (B v ¬C) ^ B ^ (D v ¬C) ^ (D v A) ^ (D v B)

# Avem regula de absortie F v (F ^ G) ~ F si F ^ (F v G) ~ F
#   => (A v ¬C) ^ A ~ A
#   => A ^ (A v B) ~ A
#   => A ^ (D v A) ~ A
#   => (B v ¬C) ^ B ~ B
#   => B ^ (D v B) ~ B

A ^ B ^ (D V ¬C)


Format DIMACS:
1 0
2 0
4 -3 0
```

Folosind https://msoos.github.io/cryptominisat_web/
SAT solver solutia este:

```
c
c
s SATISFIABLE
c conflicts: 0
v 1 2 -3 -4 0
```