**Problem:**

**1. Butch is a killer.--->killer(butch).**

**2. Mia and Marsellus are married. married(Mia,Marsellus)**

**3. Zed is dead.------->dead(zed)**

**4. Marsellus kills everyone who gives Mia a footmassage.**

**5. Mia loves everyone who is a good dancer.**

**6. Jules eats anything that is nutritious or tasty.**

**Step 1 FOL**

killer(butch).

married(mia,marcellus).

dead(zed).

givesfootmassage(zed,mia).

givesfootmassage(X,mia) -> kills(marcellus,X)

good\_dancer(X) ->loves(mia,X)

nutritious(X) ˅ tasty(X) -> eats(jules,X)

**Step2:CNF**

killer(butch).

married(mia,marcellus).

dead(zed).

givesfootmassage(zed,mia).

˥ givesfootmassage(X,mia) ˅ kills(marcellus,X)

˥ good\_dancer(X) ˅ loves(mia,X)

˥ nutritious(X) ˄ ˥ tasty(X) ˅ eats(jules,X)

**Step 3 negate goal**

**Goal-kills(marcellus,X)**

˥kills(marcellus,X)

**Step4**

~~˥~~~~kills(marcellus,X~~)˥ givesfootmassage(X,mia) ˅ ~~kills(marcellus,X~~)

˥ ~~givesfootmassage~~(X,mia) ~~givesfootmassage~~(zed,mia).

True X=zed