**K1= {garden, pond, spring, fall}**

D1 = {garden,spring,fall} represented as (1,0,1,1)

D2 = {garden,spring} represented as (1,0,1,0)

D3 = {garden,fall} -> (1,0,0,1)

D4 = {garden} ->(1,0,0,0)

D5 = {garden,garden,fall} -> (1,0,0,1)

Query : garden AND spring AND ~fall = (G ∩S) ∪(G ∩~F)

–((1,?,?,?) ∩ (?,1,?,?)) ∪ ((1,?,?.?) ∩ (?,?,?,0,)) =

–(1,1,?,?) ∪ (1,?,?,0) =

-(1,1,1,1) ∪ (1,1,1,0) ∪ (1,1,0,0) U (1,0,0,0) U (1,1,0,1) U (1,0,1,0)

Documents Retrieved = {garden,spring}, {garden}

**K2 = {garden, pond, spring}**

D1 = {garden,spring,fall} represented as (1,0,1)

D2 = {garden,spring} represented as (1,0,1)

D3 = {garden,fall} -> (1,0,0)

D4 = {garden} ->(1,0,0)

D5 = {garden,garden,fall} -> (1,0,0)

Query : (G ∩S) ∪(G ∩~F)

–((1,?,?) ∩ (?,1,?)) ∪ ((1,?,?) ∩ (?,?,0)) =

–(1,1,?) ∪ (1,?,0) =

-(1,1,1) ∪ (1,1,0) ∪ (1,0,0) =

Documents Retrieved = {garden,fall},{garden },{garden,garden,fall}