## =====separated, not sufficient======

Classification: Hypertension; Ground truth: Hyperlipidemia; Protected attribute: Gender

P(Hypertension = YES | Hyperlipidemia = YES, Gender = Female ) = 0.5560581928250616

P(Hypertension = YES | Hyperlipidemia = YES ) = 0.5560581928250615

P(Hyperlipidemia = YES | Hypertension = YES, Gender = Female ) = 0.42323725495874925

P(Hyperlipidemia = YES | Hypertension = YES ) = 0.4639580370746129

Joint probability table:

| Hyperlipidemia | Hypertension | Gender | P(hl, ht, gd) |
|---|---|---|---|
| YES | YES | Male | 0.12861701690851696 |
| YES | YES | Female | 0.09663169921848298 |
| YES | NO | Male | 0.102684344294483 |
| YES | NO | Female | 0.07714813257851699 |
| NO | YES | Male | 0.128561034877262 |
| NO | YES | Female | 0.13168397499573803 |
| NO | NO | Male | 0.165328855780738 |
| NO | NO | Female | 0.16934494134626202 |

## =====sufficient, not separated======

Classification: Hyperlipidemia; Ground truth: Diabetes; Protected attribute: Gender

P(Hyperlipidemia = YES | Diabetes = YES, Gender = Female ) = 0.49198555817121536

P(Hyperlipidemia = YES | Diabetes = YES ) = 0.5332058613502546

P(Diabetes = YES | Hyperlipidemia = YES, Gender = Female ) = 0.6459421684394565

P(Diabetes = YES | Hyperlipidemia = YES ) = 0.6459421684394565

Joint probability table:

| Hyperlipidemia | Diabetes | Gender | P(hl, db, gd) |
|---|---|---|---|
| YES | YES | Male | 0.14940730281846376 |
| YES | YES | Female | 0.11225172138199817 |
| YES | NO | Male | 0.0818940583845362 |
| YES | NO | Female | 0.061528110415001794 |
| NO | YES | Male | 0.11316005391439127 |
| NO | YES | Female | 0.11590888113498377 |
| NO | NO | Male | 0.1807298367436088 |
| NO | NO | Female | 0.18512003520701628 |