CSE GIY Kushagra garwal way sinozon it wind windensized on Nontrofessional privar (Dryen. license 16) Daves (Car. Vehicle licensellate, NonProfessional Driver-Pring, Iransent OL (Population) Valitude (rosseguide) Name Kup by this relation are (AGD, (BGD) and (GDE) Tremanulo (name, Phone Israel station sound mysh of 11) Driver (licenseNo, Person SSn) ALL DVO MON A CON MIXE Vehile (license Plate, year, Insurance Co. name, mor Lin bility, max loss Damage, . supposed on Penson.ssn) 丽 (ar (Vehille Lisensellate, make) Person (SSn, name) Truck (Vchicle. licensellate, capacity, Professional Driver. Driver. license No)

Professional Driver licenseno, medical History NonProfessional Driver (Driver license Nb) Drives (Car. Vehicle . liconsePlate, NonProfessional Driver. Priver. Licensents) The insures relationship is allowed to be included in the Vehile relation, be cause its relationship is many one. If a mule vidoes not chity have insurance, these attributes will be null for it. c) operates is many-one while Prives is many-many- operates can be inclined into the truck relation, while Daives requires additional Nome i) By Unique Key (4, D, E) Both depen dencies violate BCNF

Tixing CE-> A gives us (KGB, E) (CDE), (CEA), (DB)

Tixing D-> B gives us (ACDE), (DB). ii) Keys for these relation are (A, C, D), (B, C, D) and (C, D, E) All & dejendencies violate BCNF. Fixing BC-> A will gives us (BGDE), (BCA). Repondency A > E is gove, therefore this is not a dependency in greserving de composition. an (Notwell - lisensellate, make) (mon 182) 1000)

Jours (Vehicle Hensellate, march, 2000)

Fixing DE > B will give us (CDE), (DEB), (BCA) which will be the final decomposition. 04 truly trivial dependencies can exist. Et is a set. A>B, B>C, C>D, D>A A>B, B>A (> EABO3, D> EABC3 Select COUNT (DISTINCT (name) from 11_data hw/, 11_data how2 WHERE hell. name = hw2-data AND hwl. discount != hwd. discount If Answer: 86 SELECT (OUNT (DISTINCT hwl. name) FROM 41_duta hwl, 41-data hw2 WHERE hwl. name = hw2. name AND hol. month! = hw2. month; # Answer: 36

name vardor (20) references pricerome (name), month varchar(20) hapevences discount Month (month)); The BINF decomposition is. R3 (month, discount) CREATE THBLE discount Month (-- R S month vanhar (20) grimary key, dissount vanhar (20); CREATE TABLE PATENAME (-- R) name varday (20) primary key); RA (now, month) RI (name, price)

insent into month Name FROM SELECT anto name month FROM HI_data; FROM 41_data; SELECT DISTINCT name cost (Price as real) as insert into Discountmenta issayt into Price Name SELECT DISTINCT Month, discount H1_data; price