```
作业5
 Let R. = (A,B,C) Rr= (A,D,E)
   : Rinkz > R. or Rinkz > Rz : ER, Rz] is loseless decomposition
  "A+BC, =) A+B, A+C; CP+E=7 (+E,0+E)
   . A > C > E > A A is cardidate key 30 -) A
  : R, ARz = A, A is condidate leey
  : R, rR. → R,
              canal access of thought set in the truth of news
7.2
All nontrivial functional dependencies: A>B (->B
   Logically Imply Dependencies : A C -> B
7.6 From 7.1, 9: {9) 9.4} " (4.0) 19 of polyable on one
 " A > A , A > B , A > C , A > B > O = ) A > O , A > E
  AAABCOE SUDAN INTERNATION ON DELLANDO
 "E > A . E > ABCDE
                                , ATA, BAB, (+) (, DAB, BA E
 : (D) : ( ) ABCDE, D + ABCDE
 : B + D
         · B-> ABCDE
  . Ax > a, BCx > d, CDx > d, Ex > d, di, subjet of {AB,C, DE}
 : A, BC, CD, E are condidute keys
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7.31
from AB
: AB -> (D =) AB+ (, AB+ D
: AB+ = { A,B(,D} = 1 = -) (= = (4) = - y=k, 9 = k (= 3) = 1
-: AC already exists AC+DF = > AC+D, AC+E
: AB+= {4,B,C,D,E}
$\beta \in \mathcal{S}_{1}, \beta \in \mathcal{S}_{2}$
: cannot access G through set = of functional dependencies
: AB+ # R is not in BCNF
SECO SECTION OF LINGUISTING IN
La R. = ABULD = {A,B, (,D] R= (R- ((,D3)) UAB = {A,B,E,4)
For R,
AB+ (1) has candidate least for RI AB+ = {A,B,C,P} : R, in BCNF
For R2, SITA OFA (= 0 = 0 = 0 = 0 - 1 = 0 = 1 = 2 = 4 "
i missing (or O affrible : Re is not in BCNF
E-A LES ACCDE LA LAN 1890 (SE DODINE EL L'ANDIANTE LA LINE
BCNF decomposition is not dependency preserving because not all the FDs are
contained in either relation.
The same of the sa
[30,28A3], reduction of expectations, fix a first when the fill of E
16 El Call on which keys

731 (d): (D + AB = > (D + A, (D + B $A \rightarrow BC : \gamma A \rightarrow B A \rightarrow C$ $(D \rightarrow A \rightarrow B : \gamma CP \rightarrow B,$ Cor Dalone don't determine : (D > B is nontrivial FD From A, A + BC => A + B, A + C .: A+ = {A,B,C} : A+ R : A+ BC violates BUVF Let R = AUBC= {A,B, (3, R== (B(-A)) = {A,P,E,6}} From R, A+: {A,B,C} = R, : R, is in BCNF tom Rz BD+E Bndin R2, CD>ABC, C not in R2,

A > BC, B and C missing

: R2 is is BCNF (c) From (b) Rinkz: A :: A+B(=) A+: {A,B(} : A is a key : Rink is lossles,) A>B(, in R): BD>F, not fully contained is either relations; (D=14B (D=A (D+B) not preserved in either obtime :. The BCNF decompilitin is not depending preserving because some of the original FD involve affiliates split between the decomposes relation.