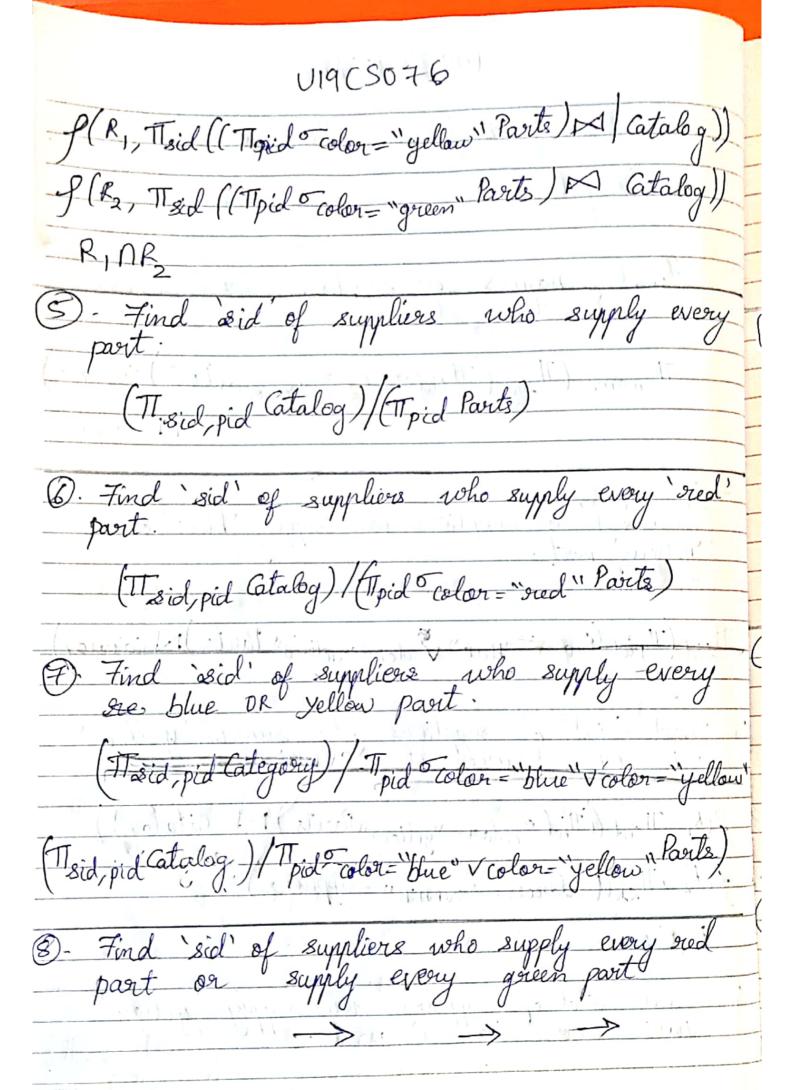
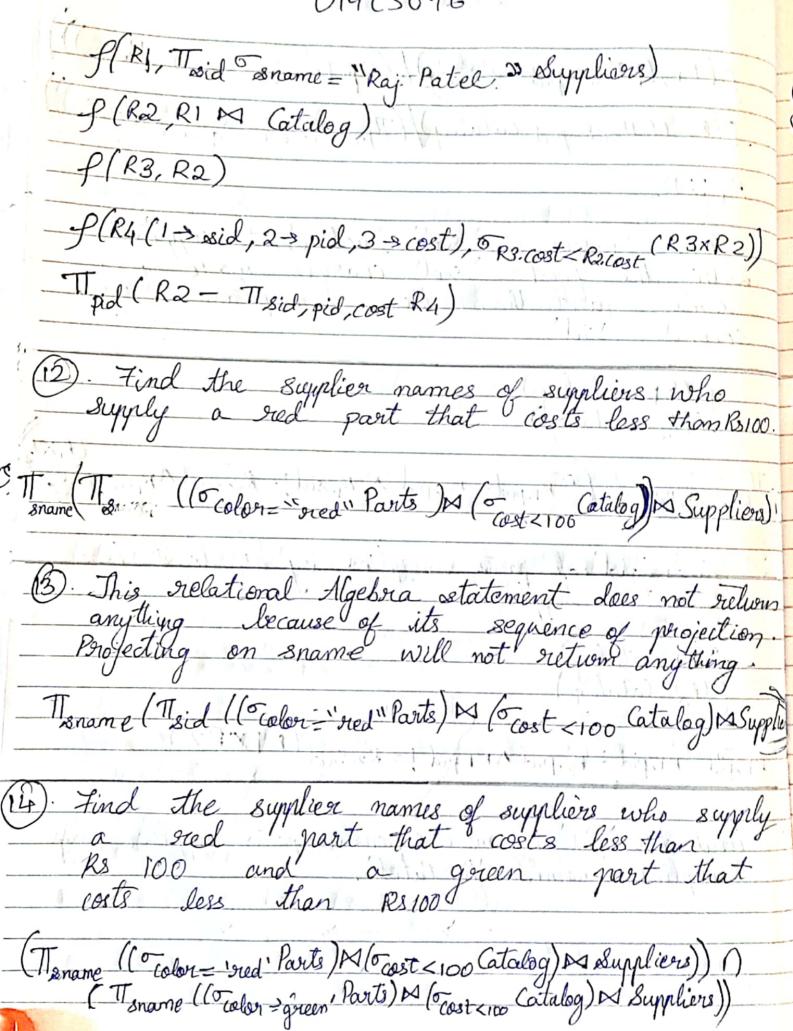
U19CS076.
Relational Algebra
Case study 1
1. Find names of suppliers who supply yellow part.
Tonoume (T) sid (T) pid color = "Yellow" Parts) × Catalog N Supplier
X Supplied
Outr's was a source and a soul on the Charles of the Charles of
2. tind sid of suppliers who supply blue or yellow part.
genow part
Tsid (Tpid (o color="blue" V color = "yellow" Parts) M catalog)
3. Find sid' of suppliers who supply 'yellow' part or are at "SVNIT'
P(R, Tsid ((Tid color="yellow"Parts) M Catalog))
P(R2, The side address = "SVNIT" Suppliers)
R,UR2
1 To 1 all a suplicate and a suplicity of



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(15) - Fo
(15) Find the supplier ids of suppliers who supply
That costs less than INK 100'
(15) Find the supplier ids of suppliers who supply a green part that costs less than INR 100 green part that costs less than INR 100
(Tsid (Color= red Parts) N (ocost < 100 (atalog) N Suppliers)) M
(Tsid (l'ocolor = green Parts) M (ocost < 100 Catalog) M Suppliers)
Supply a red part that costs less than NR100 and a green part that costs less than INR100
- suffly a sea part that costs less than
INR 100.
Transe ([T] sid, sname ((Tolor = 'red " Parts) M (Tost 2100 (atalog)
M. Suppliers))
(Tsid, sname (Color="green" Parts) PA (ocost< 100 Catalog) DA Suppliers))

	U19CS076
-	Case Study II
	Boeing aircraft. Society of pilots certified for some
	e_id (Taname= Boeing (Aircraft M (ertified))
2	Find the names of pilots certified for some Boeing wichtraft
_	Tename (Taname = "Boeing" (Aircraft & Certified & Employees)
3 	Find the aid of all aircraft that can be used on non-stop flights from Sweat to Delhi.
	From Sweet 1 to = noth: " (+ lights))
(Z	Taid (ourising-range > distance (Air craft × RI))
	Solentify the names flights that can be piloted by every pilot whose salary is more than
	The not distance < cruising - stange * Salary > 100000 (Flights M Aincraft M Certified M Employees)))
	(suproyees)))

Planes with a range greater than 3000 km but are not certified on any Boing aircraft. of (RL.T, Theid Cowaising range > 2000 (Aircraft is Cartified)) Thename (Employees MRLT-Theid (or anome = Boeing (Aircraft 14 (enlifted))) (6). Find the e-id of employees who make highest salary f (R1, Employees)

f (R2, Employees)

f (R2, Employees)

Finds all employees not having highest salary

f(R3, TT R2. emid (R1 M1

R1. Salary > R2. Salary R2) (TI RI) - R3 -> Subtracts all employees not having highest salary from total set of empl. (F). Find the exide id of employees who make second highest salary.

> Finding highest salary employee and removing it from total set of employee. f (RI Employees) g (R2, Employees) I R3, TR2.e-id (RIMRI. salwy > R2, salary R2) g (R4, R2 × R3)

X A X 3 X bx1 1 3

S(R5, R2 MR3)

Set of all empl not having second high:

S(R6, TT, R5.e-id (R4 MR1. Salary > R5.8 alary)

R5.e-id (R4 MR1. Salary > R5.8 alary) (Ted R3) - R6 > Employee id with second highest salary d eid of employees who are certified exactly three aircraft. Jo get empl with at least 3 air craft certified (CIXC2XC) (C5, Te-id (C1xc2xc) (C1xc2xc) (C1xc2xc) (CI, e.id = c2. e.id = C3. e.id = G. e.id) (C1.a.id + c2.a.id = C3.a.id # C4.a_id) ((4 x R2 x C.3 x C4)))

> To get empl with at least 4 aircraft certified C5-C6