Name: ZOHAIB HASSAN SOOMRO

RollNo#: 19SW42

Subject: DBS(Pr.)

LAB#3 TASKS

Task#1:

ITEM	COLORS	PRICE($)	TAX
T-Shirt	Red, Blue	12.00	0.60
Polo	Red, Yellow	12.00	0.60
Sweat Shirt	Blue, Black	25.00	1.25

Convert the above table in 1NF, 2NF, 3NF.

Ans:

i) 1st NF:

ITEM	COLORS	PRICE($)	TAX
T-Shirt	Red	12.00	0.60
T-Shirt	Blue	12.00	0.60
Polo	Red	12.00	0.60
Polo	Yellow	12.00	0.60
Sweat Shirt	Blue	25.00	1.25
Sweat Shirt	Black	25.00	1.25

ii) 2nd NF:

Candidate Keys= ITEM+COLORS

Non-prime attributes= PRICE($)+TAX

ITEM	PRICE($)	TAX
T-Shirt	12.00	0.60
Polo	12.00	0.60
Sweat Shirt	25.00	1.25

ITEM	COLORS
T–Shirt	Red
T–Shirt	Blue
Polo	Red
Polo	Yellow
Sweat Shirt	Blue
Sweat Shirt	Black

iii)   3rd NF:

PRICE($)	TAX
12.00	0.60
25.00	1.25

ITEM	PRICE($)
T–Shirt	12.00
Polo	12.00
Sweat Shirt	25.00

ITEM	COLORS
T–Shirt	Red
T–Shirt	Blue
Polo	Red
Polo	Yellow
Sweat Shirt	Blue
Sweat Shirt	Black

Task#2:

SUPPLIER	NAME	CITY_ID	CITY	PART	QUANTITY
S1	Ali	10	Paris	P3	257

S1	Ali	10	Paris	P1	500
S1	Ali	10	Paris	P4	125
S2	James	12	London	P3	200
S7	Robert	10	Paris	P4	342

Convert the above table in 1NF, 2NF, 3NF.

Ans:

i) <u>1st NF:</u>

The Table is already in 1NF:

SUPPLIER	NAME	CITY_ID	CITY	PART	QUANTITY
S1	Ali	10	Paris	P3	257
S1	Ali	10	Paris	P1	500
S1	Ali	10	Paris	P4	125
S2	James	12	London	P3	200
S7	Robert	10	Paris	P4	342

ii) <u>2nd NF:</u>

SUPPLIER	NAME	CITY_ID	CITY
S1	Ali	10	Paris
S2	James	12	London
S7	Robert	10	Paris

SUPPLIER	PART	QUANTITY
S1	P3	257
S1	P1	500

S1	P4	125
S2	P3	200
S7	P4	342

iii) 3rd NF:

SUPPLIER	NAME	CITY_ID
S1	Ali	10
S2	James	12
S7	Robert	10

CITY_ID	CITY
10	Paris
12	London
10	Paris

SUPPLIER	PART	QUANTITY
S1	P3	257
S1	P1	500
S1	P4	125
S2	P3	200
S7	P4	342