

```
SELECT * FROM sql_cx_live.laptops;
```

```
SELECT * FROM laptops;
```

```
CREATE TABLE laptops_backup LIKE laptops;
```

```
INSERT INTO laptops_backup  
SELECT * FROM laptops;
```

```
SELECT DATA_LENGTH/1024 FROM information_schema.TABLES  
WHERE TABLE_SCHEMA = 'sql_cx_live'  
AND TABLE_NAME = 'laptops';
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops DROP COLUMN `Unnamed: 0`;
```

```
SELECT * FROM laptops;
```

```
DELETE FROM laptops  
WHERE `index` IN (SELECT `index` FROM laptops  
WHERE Company IS NULL AND TypeName IS NULL AND Inches IS NULL  
AND ScreenResolution IS NULL AND Cpu IS NULL AND Ram IS NULL  
AND Memory IS NULL AND Gpu IS NULL AND OpSys IS NULL AND  
WEIGHT IS NULL AND Price IS NULL);
```

```
ALTER TABLE laptops MODIFY COLUMN Inches DECIMAL(10,1);
```

```
SELECT * FROM laptops;
```

```
UPDATE laptops I1  
SET Ram = (SELECT REPLACE(Ram,'GB','') FROM laptops I2 WHERE I2.index = I1.index);
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops MODIFY COLUMN Ram INTEGER;
```

```
SELECT DATA_LENGTH/1024 FROM information_schema.TABLES  
WHERE TABLE_SCHEMA = 'sql_cx_live'  
AND TABLE_NAME = 'laptops';
```

```
UPDATE laptops I1  
SET Weight = (SELECT REPLACE(Weight,'kg','')  
FROM laptops I2 WHERE I2.index = I1.index);
```

```
SELECT * FROM laptops;
```

```
UPDATE laptops l1
SET Price = (SELECT ROUND(Price)
             FROM laptops l2 WHERE l2.index = l1.index);
```

```
ALTER TABLE laptops MODIFY COLUMN Price INTEGER;
```

```
SELECT DISTINCT OpSys FROM laptops;
```

```
-- mac
-- windows
-- linux
-- no os
-- Android chrome(others)
```

```
SELECT OpSys,
CASE
    WHEN OpSys LIKE '%mac%' THEN 'macos'
    WHEN OpSys LIKE 'windows%' THEN 'windows'
    WHEN OpSys LIKE '%linux%' THEN 'linux'
    WHEN OpSys = 'No OS' THEN 'N/A'
    ELSE 'other'
END AS 'os_brand'
FROM laptops;
```

```
UPDATE laptops
SET OpSys =
CASE
    WHEN OpSys LIKE '%mac%' THEN 'macos'
    WHEN OpSys LIKE 'windows%' THEN 'windows'
    WHEN OpSys LIKE '%linux%' THEN 'linux'
    WHEN OpSys = 'No OS' THEN 'N/A'
    ELSE 'other'
END;
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops
ADD COLUMN gpu_brand VARCHAR(255) AFTER Gpu,
ADD COLUMN gpu_name VARCHAR(255) AFTER gpu_brand;
```

```
SELECT * FROM laptops;
```

```
UPDATE laptops I1
SET gpu_brand = (SELECT SUBSTRING_INDEX(Gpu,' ',1)
                  FROM laptops I2 WHERE I2.index = I1.index);
```

```
UPDATE laptops I1
SET gpu_name = (SELECT REPLACE(Gpu,gpu_brand,"")
                FROM laptops I2 WHERE I2.index = I1.index);
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops DROP COLUMN Gpu;
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops
ADD COLUMN cpu_brand VARCHAR(255) AFTER Cpu,
ADD COLUMN cpu_name VARCHAR(255) AFTER cpu_brand,
ADD COLUMN cpu_speed DECIMAL(10,1) AFTER cpu_name;
```

```
SELECT * FROM laptops;
```

```
UPDATE laptops I1
SET cpu_brand = (SELECT SUBSTRING_INDEX(Cpu,' ',1)
                  FROM laptops I2 WHERE I2.index = I1.index);
```

```
UPDATE laptops I1
SET cpu_speed = (SELECT CAST(REPLACE(SUBSTRING_INDEX(Cpu,' ',-1),'GHz','')
                           AS DECIMAL(10,2)) FROM laptops I2
                  WHERE I2.index = I1.index);
```

```
UPDATE laptops I1
SET cpu_name = (SELECT
                REPLACE(REPLACE(Cpu,cpu_brand,""),SUBSTRING_INDEX(REPLACE(Cpu,cpu_brand,""),' ',-1),"")
                FROM laptops I2
                WHERE I2.index = I1.index);
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops DROP COLUMN Cpu;
```

```
SELECT ScreenResolution,
```

```
SUBSTRING_INDEX(SUBSTRING_INDEX(ScreenResolution, '-',1),'x',1),  
SUBSTRING_INDEX(SUBSTRING_INDEX(ScreenResolution, '-',1),'x',-1)  
FROM laptops;
```

```
ALTER TABLE laptops  
ADD COLUMN resolution_width INTEGER AFTER ScreenResolution,  
ADD COLUMN resolution_height INTEGER AFTER resolution_width;
```

```
SELECT * FROM laptops;
```

```
UPDATE laptops  
SET resolution_width = SUBSTRING_INDEX(SUBSTRING_INDEX(ScreenResolution, '  
'-',1),'x',1),  
resolution_height = SUBSTRING_INDEX(SUBSTRING_INDEX(ScreenResolution, '-',1),'x',-1);
```

```
ALTER TABLE laptops  
ADD COLUMN touchscreen INTEGER AFTER resolution_height;
```

```
SELECT ScreenResolution LIKE '%Touch%' FROM laptops;
```

```
UPDATE laptops  
SET touchscreen = ScreenResolution LIKE '%Touch%';
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops  
DROP COLUMN ScreenResolution;
```

```
SELECT * FROM laptops;
```

```
SELECT cpu_name,  
SUBSTRING_INDEX(TRIM(cpu_name),',',2)  
FROM laptops;
```

```
UPDATE laptops  
SET cpu_name = SUBSTRING_INDEX(TRIM(cpu_name),',',2);
```

```
SELECT DISTINCT cpu_name FROM laptops;
```

```
SELECT Memory FROM laptops;
```

```
ALTER TABLE laptops
```

```
ADD COLUMN memory_type VARCHAR(255) AFTER Memory,
ADD COLUMN primary_storage INTEGER AFTER memory_type,
ADD COLUMN secondary_storage INTEGER AFTER primary_storage;
```

```
SELECT Memory,
CASE
    WHEN Memory LIKE '%SSD%' AND Memory LIKE '%HDD%' THEN 'Hybrid'
    WHEN Memory LIKE '%SSD%' THEN 'SSD'
    WHEN Memory LIKE '%HDD%' THEN 'HDD'
    WHEN Memory LIKE '%Flash Storage%' THEN 'Flash Storage'
    WHEN Memory LIKE '%Hybrid%' THEN 'Hybrid'
    WHEN Memory LIKE '%Flash Storage%' AND Memory LIKE '%HDD%' THEN 'Hybrid'
    ELSE NULL
END AS 'memory_type'
FROM laptops;
```

```
UPDATE laptops
SET memory_type = CASE
    WHEN Memory LIKE '%SSD%' AND Memory LIKE '%HDD%' THEN 'Hybrid'
    WHEN Memory LIKE '%SSD%' THEN 'SSD'
    WHEN Memory LIKE '%HDD%' THEN 'HDD'
    WHEN Memory LIKE '%Flash Storage%' THEN 'Flash Storage'
    WHEN Memory LIKE '%Hybrid%' THEN 'Hybrid'
    WHEN Memory LIKE '%Flash Storage%' AND Memory LIKE '%HDD%' THEN 'Hybrid'
    ELSE NULL
END;
```

```
SELECT Memory,
REGEXP_SUBSTR(SUBSTRING_INDEX(Memory,'+',1),'[0-9]+'),
CASE WHEN Memory LIKE '%+%' THEN
REGEXP_SUBSTR(SUBSTRING_INDEX(Memory,'+',-1),'[0-9]+') ELSE 0 END
FROM laptops;
```

```
UPDATE laptops
SET primary_storage = REGEXP_SUBSTR(SUBSTRING_INDEX(Memory,'+',1),'[0-9]+'),
secondary_storage = CASE WHEN Memory LIKE '%+%' THEN
REGEXP_SUBSTR(SUBSTRING_INDEX(Memory,'+',-1),'[0-9]+') ELSE 0 END;
```

```
SELECT
primary_storage,
CASE WHEN primary_storage <= 2 THEN primary_storage*1024 ELSE primary_storage END,
secondary_storage,
CASE WHEN secondary_storage <= 2 THEN secondary_storage*1024 ELSE
secondary_storage END
```

```
FROM laptops;
```

```
UPDATE laptops
```

```
SET primary_storage = CASE WHEN primary_storage <= 2 THEN primary_storage*1024 ELSE  
primary_storage END,
```

```
secondary_storage = CASE WHEN secondary_storage <= 2 THEN secondary_storage*1024  
ELSE secondary_storage END;
```

```
SELECT * FROM laptops;
```

```
ALTER TABLE laptops DROP COLUMN gpu_name;
```

```
SELECT * FROM laptops;
```