```
-- CREATE DATABASE StudentDB;
-- USE StudentDB;

/*
CREATE TABLE PlacementDrive (
  Drive_id INT PRIMARY KEY AUTO_INCREMENT,
  Pcompany_name VARCHAR(100) NOT NULL,
  package DECIMAL(10,2) CHECK(package > 0),
  location VARCHAR(50)
);

CREATE TABLE Training (
  T_id INT PRIMARY KEY AUTO_INCREMENT,
  Tcompany_name VARCHAR(100) NOT NULL,
  T_Fee DECIMAL(10,2) CHECK(T_Fee > 0),
  T_year INT
);

CREATE TABLE Student (
  s_id INT PRIMARY KEY AUTO_INCREMENT,
  Drive_id INT,
  T_id INT,
  s_name VARCHAR(100) NOT NULL,
  CGPA DECIMAL(3,2) CHECK(CGPA BETWEEN 0 AND 10),
  s_branch VARCHAR(50),
  s_dob DATE,
```

```
  FOREIGN KEY (Drive_id) REFERENCES PlacementDrive(Drive_id) ON DELETE CASCADE,
  FOREIGN KEY (T_id) REFERENCES Training(T_id) ON DELETE CASCADE
);

INSERT INTO PlacementDrive (Pcompany_name, package, location)
VALUES
('TCS', 30000, 'Pune'),
('Infosys', 40000, 'Mumbai'),
('Wipro', 50000, 'Pune'),
('Tech Mahindra', 35000, 'Nashik'),
('Cognizant', 45000, 'Mumbai');


INSERT INTO Training (Tcompany_name, T_Fee, T_year)
VALUES
('SkillEdge', 15000, 2018),
('CodeAcademy', 18000, 2019),
('TechGuru', 20000, 2019),
('ProLearn', 22000, 2021),
('Udemy', 17000, 2021);


INSERT INTO Student (Drive_id, T_id, s_name, CGPA, s_branch, s_dob)
VALUES
(1, 1, 'Amit', 8.5, 'Computer', '2000-02-10'),
(2, 2, 'Deepa', 7.2, 'IT', '2000-06-22'),
```

```
(3, 3, 'Ravi', 6.8, 'ENTC', '2001-04-18'),
(4, 4, 'Disha', 9.0, 'Computer', '1999-11-25'),
(5, 5, 'Anuj', 8.0, 'IT', '2001-01-15'),
(1, 3, 'Priya', 9.5, 'Computer', '2000-08-11'),
(2, 4, 'Harsh', 6.9, 'Mechanical', '1999-09-09'),
(3, 5, 'Divya', 7.5, 'IT', '2000-07-07'),
(4, 1, 'Aditya', 8.9, 'Computer', '1998-03-30'),
(5, 2, 'Dhanashree', 9.2, 'IT', '1999-12-19');
*/

-- 1. All students from computer and it and name starts a ord

/*
select * from Student
where s_branch in ('Computer','IT') and (s_name like 'a%' or
s_name like 'd&');
*/

-- 2. differnet companies
-- select count(distinct Pcompany_name) as Total_Companies
-- from PlacementDrive;

-- 3. Increase training fee by 15% for year 2019
/*
update Training
set T_Fee  =T_Fee * 1.15
```

```
where T_year = 2019;

select * from Training;
*/

-- 4. delete students having cgpa <7

-- delete from Student
-- where CGPA<7;

-- 5. Companies in Pune or Mumbai

/*
select Pcompany_name, location
from PlacementDrive
where location in ('Mumbai','Pune');
*/

-- 6.Students who joined trainig in btoh 2019and 2021
/*
select s_name
from Student s
join training t on s.T_id  =t.T_id
where T_year in(2019,2021)
group by s_name
having count(distinct T_year) = 2;
```

```
*/

-- 7. Studetns with max CGPA + between 7 to 9

/*
select s_name, CGPA
from Student
where CGPA = (select max(CGPA) from Student) or
(CGPA between 7 and 9);
*/

-- 8. Display student name and T_id with decreasing order of fee
/*
select s.s_name,s.T_id, t.T_Fee
from Student s
join Training t on s.T_id  = t.T_id
order by t.T_Fee DESC;
*/

-- 9. Show company name, stud name, package
/*
select p.Pcompany_name, s.s_name, p.location, p.package
from Student s
join PlacementDrive p on s.Drive_id = p.Drive_id
where p.package IN (30000,40000,50000);
*/
```

```
-- create view
CREATE VIEW StudentPlacementView AS
SELECT s.s_name, s.s_branch, p.Pcompany_name, p.package
FROM Student s
JOIN PlacementDrive p ON s.Drive_id = p.Drive_id;


SELECT * FROM StudentPlacementView;

-- Simple Index
CREATE INDEX idx_student_name ON Student(s_name);

-- Unique Index
CREATE UNIQUE INDEX idx_unique_training ON Training(Tcompany_name);

-- Composite Index
CREATE INDEX idx_company_location ON PlacementDrive(Pcompany_name, location);

-- Text Index (for full-text search; only on CHAR/VARCHAR columns)
CREATE FULLTEXT INDEX idx_company_text ON PlacementDrive(Pcompany_name);


SHOW INDEX FROM Student;
SHOW INDEX FROM Training;
SHOW INDEX FROM PlacementDrive;
```