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## Roll No. 202251102

# Indian Institute of Information Technology Vadodara Database Management Systems Laboratory Assignment WEEK-3

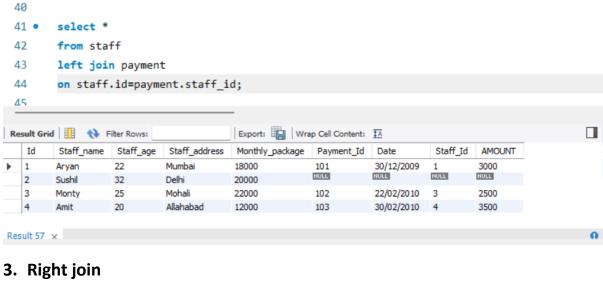
-by PRASHANT BHARTI (202251102)

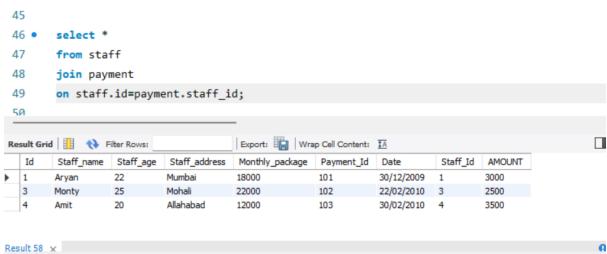
## **Exercise 1**

## 1. Inner join

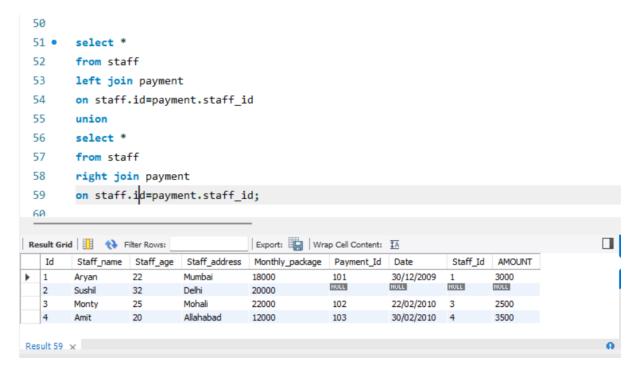
```
30
       select * from staff;
        select * from payment;
        truncate table payment;
  34 •
        drop table payment;
  35
  36 •
        select *
  37
        from staff
        inner join payment
         on staff.id=payment.staff_id;
                                                                                             Export: Wrap Cell Content: IA
         Staff_name Staff_age Staff_address Monthly_package Payment_Id Date
                                                                     Staff_Id AMOUNT
                  22
                          Mumbai
                                     18000
                                                           30/12/2009
                                                                            3000
                25
                                                          22/02/2010 3
   3
        Monty
                        Mohali
                                     22000
                                                  102
                                                                            2500
                  20
                          Allahabad
                                     12000
                                                           30/02/2010 4
Result 56 ×
```

## 2. Left join





# 4. Full join



\_\_\_\_\_\_

**Exercise B-1** 

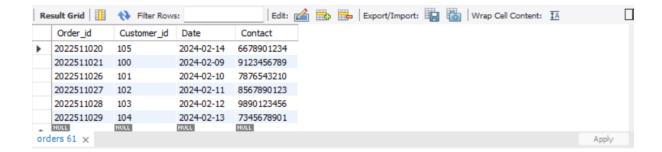
# **Creating Tables**

```
60
61
        -- B1-----
62 ● ⊝ create table customer(
        customer_id int,
       c_name varchar(10),
64
65
       Email varchar(30),
        Address varchar(20),
        primary key (customer_id)
67
68
      ٠);
69 ● ⊝ create table orders (
70
       Order_id int,
71
       Customer_id int ,
       Date varchar(20),
       Contact bigint,
73
74
       primary key (Order_id),
        foreign key (Customer_id) references customer(Customer_id)
      ٠);
76
77 • select * from customer;
        select * from orders;
        drop table orders;
79
80
        insert into customer values
        (100, "Aarav", "aarav@gmail.com", "Ahemdabad"),
82
       (101, "Aryan", "Aryan@yahoo.com", "Delhi"),
83
        (102, "Dhruv", "Dhruv@outlook.com", "Mumbai"),
        (103, "Nitya", "Nitya@gmail.com", "Pune"),
85
        (104, "Vikram", "Vikram@yahoo.com", "Chennai"),
86
        (105, "Yuvika", "Yuvika@gmail.com", "Kolkata");
88
89 •
      INSERT INTO orders VALUES
        (2022511021, 100, '2024-02-09', 9123456789),
91
        (2022511026, 101, '2024-02-10', 7876543210),
        (2022511027, 102, '2024-02-11', 8567890123),
92
        (2022511028, 103, '2024-02-12', 9890123456),
94
        (2022511029, 104, '2024-02-13', 7345678901),
        (2022511020, 105, '2024-02-14', 6678901234);
```

#### **Customer table**

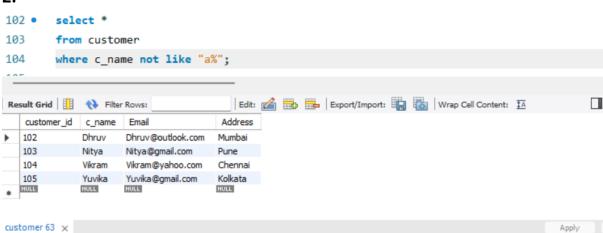
Result Grid		Filter Rows:		Edit: 🔏	-	Export/Import:	0	Wrap Cell Con	tent:	<u>‡A</u>		
	customer_id	c_name	Email	Address								
•	100	Aarav	aarav@gmail.com	Ahemdabad								П
	101	Aryan	Aryan@yahoo.com	Delhi								- 1
	102	Dhruv	Dhruv@outlook.com	Mumbai								
	103	Nitya	Nitya@gmail.com	Pune								- 1
	104	Vikram	Vikram@yahoo.com	Chennai								- 1
	105	Yuvika	Yuvika@gmail.com	Kolkata								
-	NULL	HULL	NULL	NULL								
customer 60 ×											Apply	

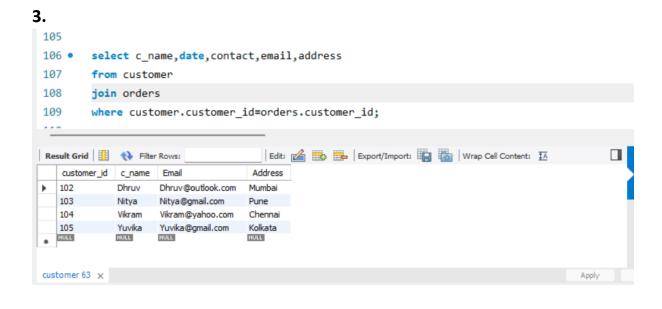
## **Orders table**

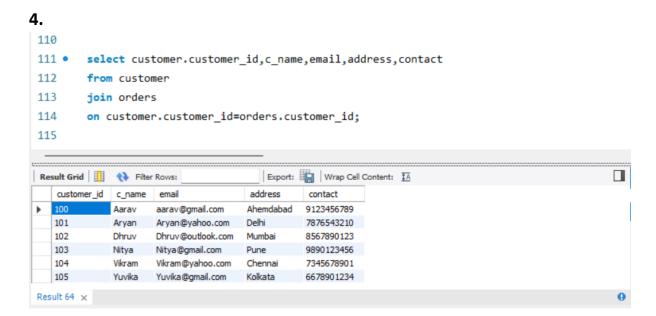


## Queries









**Exercise B-2** 

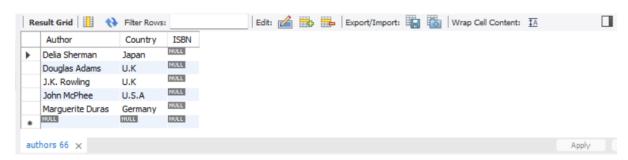
## **Create Tables**

```
116
117 ● ⊖ create table Books (
118
        ISBN int ,
119
        Title varchar(50),
        Unit_price int,
120
121
        Author_Name varchar(40),
122
        Publisher_name varchar(40),
123
        Publish year int ,
        primary key (ISBN, Author_Name)
124
125
        );
126 • 🔾 create table authors (
127
        Author varchar(40) primary key,
128
        Country varchar(40),
129
        ISBN int ,
130
        foreign key (ISBN ,Author) references Books (ISBN,Author_Name)
131
132
133
134 •
        INSERT INTO Books (ISBN, Title, Unit price, Author Name, Publisher name, Publish year)
135
        VALUES
        (1001, 'Harry Potter', 3100, 'J.K. Rowling', 'Scholastic Press', 1998),
136
        (1002, 'The Hitchhiker''s Guide to the Galaxy', 4500, 'Douglas Adams', 'Mass Market paperback', 2000),
137
        (1003, 'Changeling', 800, 'Delia Sherman', 'Springer', 2008),
138
        (1004, 'Giving Good Weight', 1280, 'John McPhee', 'Spiegel and Grau', 2006),
139
        (1005, 'Writing', 1700, 'Marguerite Duras', 'Paperback', 2001);
141
142 •
        INSERT INTO authors (Author, Country)
143
        VALUES
144
        ('J.K. Rowling', 'U.K'),
        ('Douglas Adams', 'U.K'),
145
        ('Delia Sherman', 'Japan'),
146
        ('John McPhee', 'U.S.A'),
        ('Marguerite Duras', 'Germany');
148
```

#### **Books table**



#### **Author table**

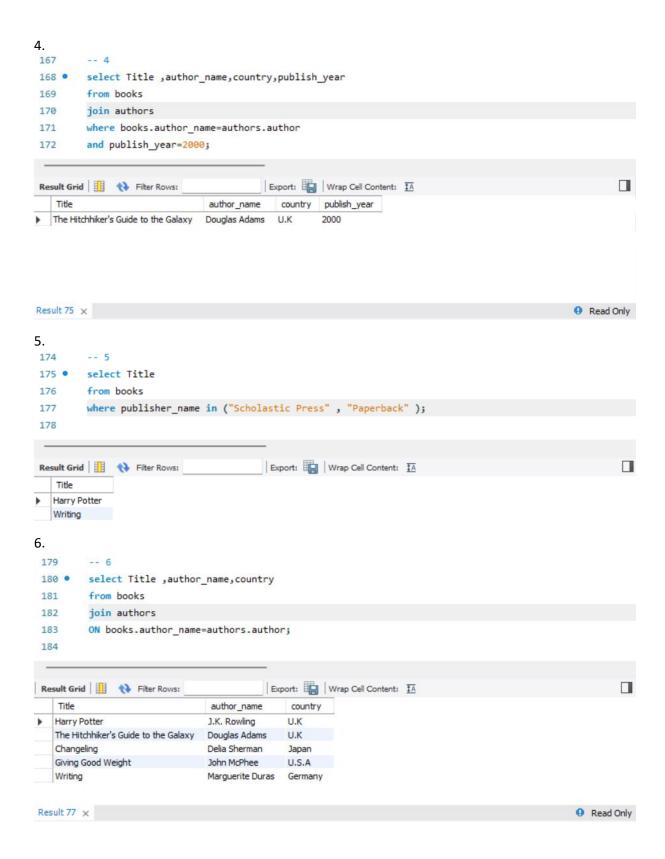


## Queries

books 71 ×

```
1.
 153
 154 • select count(title) as book_count
 155
        from books;
Export: Wrap Cell Content: 1A
                                                                                                   book_count
> 5
2.
157
        -- 2
        select*
        from books
159
160
        limit 3;
161
 | Edit: 🕍 🖶 | Export/Import: 📳 🐻 | Wrap Cell Content: 🏗 | Fetch rows:
  ISBN Title
                                  Unit_price Author_Name Publisher_name
                                                                         Publish_year
▶ 1001 Harry Potter
                                           J.K. Rowling
                                                                         1998
                                  3100
                                                       Scholastic Press
   1002 The Hitchhiker's Guide to the Galaxy
                                  4500
                                          Douglas Adams Mass Market paperback 2000
                                           Delia Sherman
   1003 Changeling
                                  800
                                                      Springer
                                                                        2008
                                                                        NULL
NULL
       NULL
                                  NULL
                                          NULL
                                                      NULL
books 70 🗴
3.
162
        -- 3
 163 • select Title
 164
        from books
        where unit price between 1000 and 3000;
                                      Export: Wrap Cell Content: IA
                                                                                                  Title
  Giving Good Weight
  Writing
```

Read Only



```
7.
185
186 •
        select author_name ,Title ,country
 187
         from books
         join authors
 188
 189
         ON books.author_name=authors.author
         and country= 'U.K';
 190
Export: Wrap Cell Content: IA
                                                                                                     author_name
               Title
                                           country
  J.K. Rowling
               Harry Potter
                                          U.K
  Douglas Adams The Hitchhiker's Guide to the Galaxy U.K
```

**Exercise B-3** 

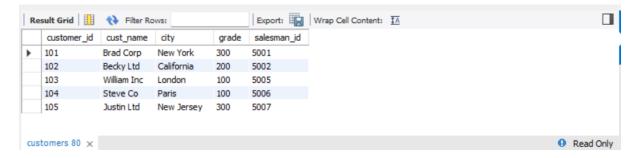
#### **Create tables**

```
193 • 😑 create table salesman(
         salesman_id int primary key,
         name varchar(20),
196
        city varchar(20),
197
        commission float
      );
198
199 • Greate table customers(
200
        customer_id int,
201
        cust_name varchar(20),
       city varchar(20),
203
        grade int,
204
        salesman_id int,
        foreign key (salesman_id) references salesman(salesman_id)
205
206
207
208 •
        INSERT INTO salesman (salesman_id, name, city, commission)
           (5001, 'James Hoog', 'New York', 0.15),
            (5002, 'Nailil Knite', 'Paris', 0.13),
211
           (5005, 'Pit Alex', 'London', 0.11),
212
           (5006, 'Mc Lyon', 'Paris', 0.14),
213
           (5007, 'Paul Adam', 'Rome', 0.12);
214
215
            INSERT INTO customers (customer_id, cust_name, city, grade, salesman_id)
216 •
           (101, 'Brad Corp', 'New York', 300, '5001'),
           (102, 'Becky Ltd', 'California', 200, '5002'),
219
            (103, 'William Inc', 'London', 100, '5005'),
220
         (104, 'Steve Co', 'Paris', 100, '5006'),
221
222
            (105, 'Justin Ltd', 'New Jersey', 300, '5007');
223
```

#### Salesman table



## **Customers table**



## Queries

#### 1.

