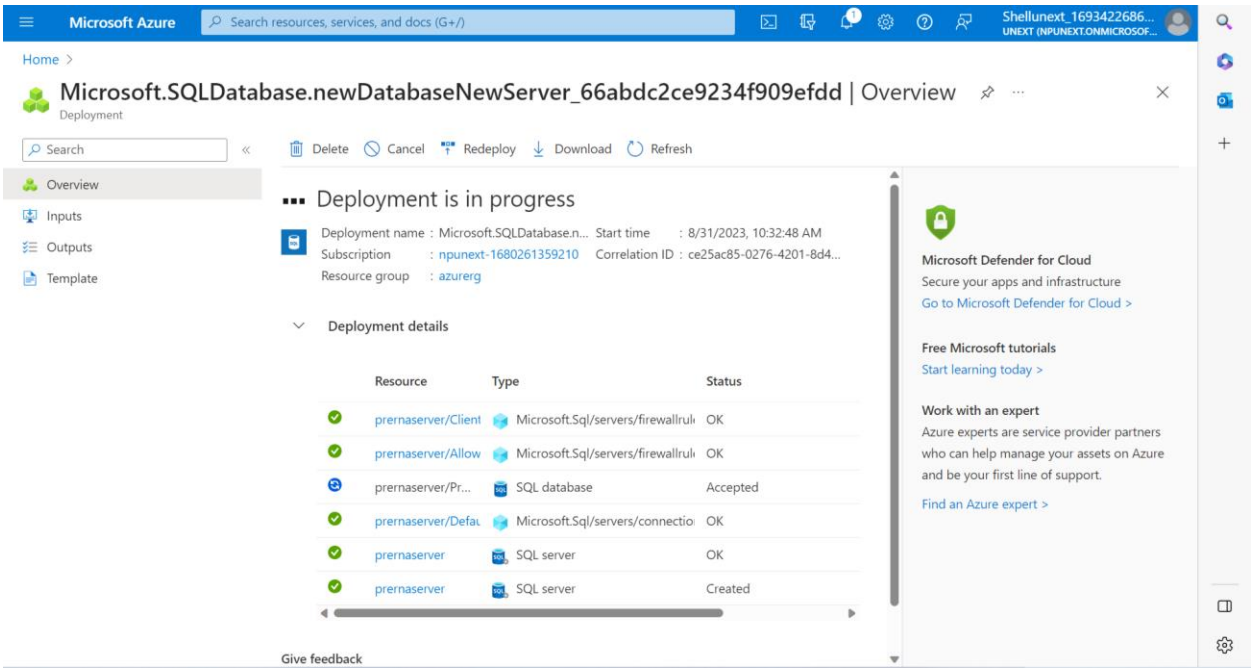
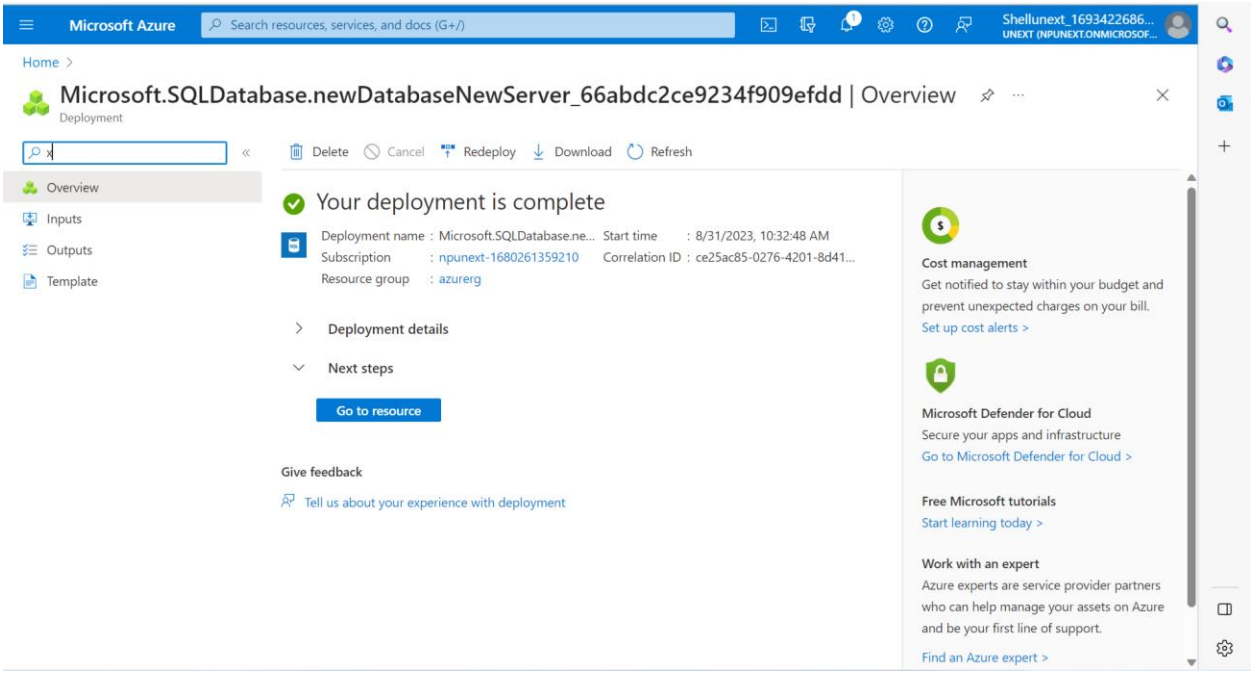
Prerna Singh **DBMS Day-3**

Emp Code- 654870

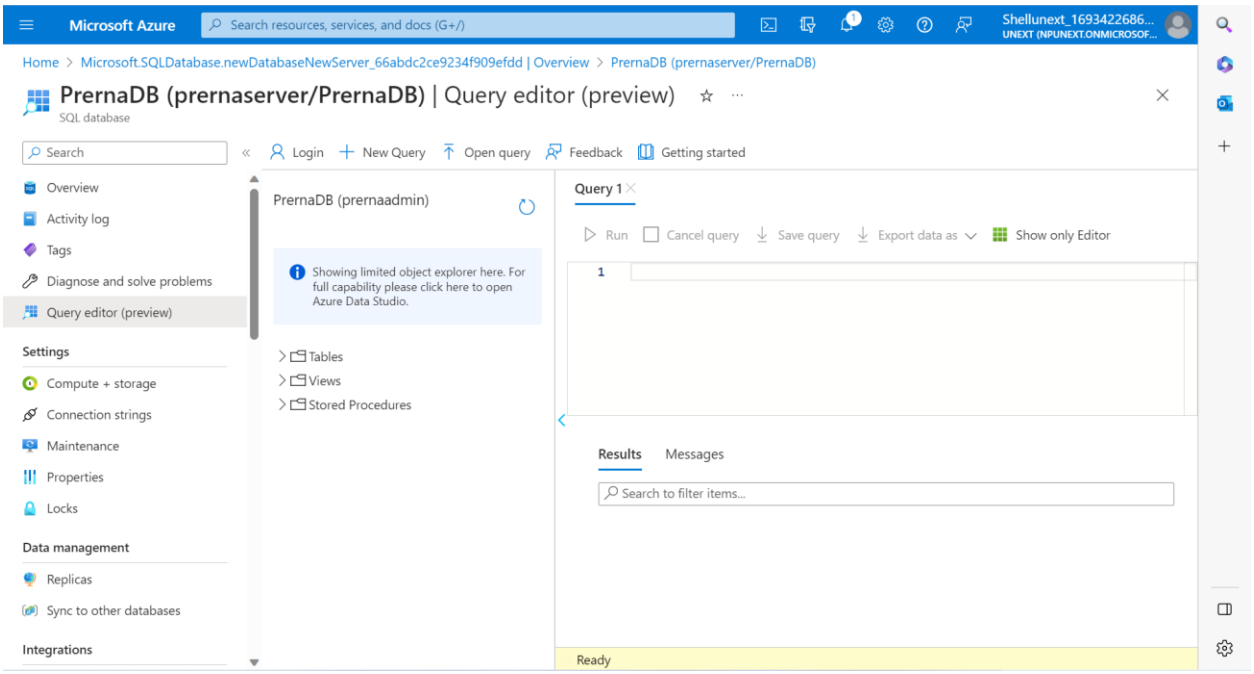
AZURE SQL

Creating SQL Server-

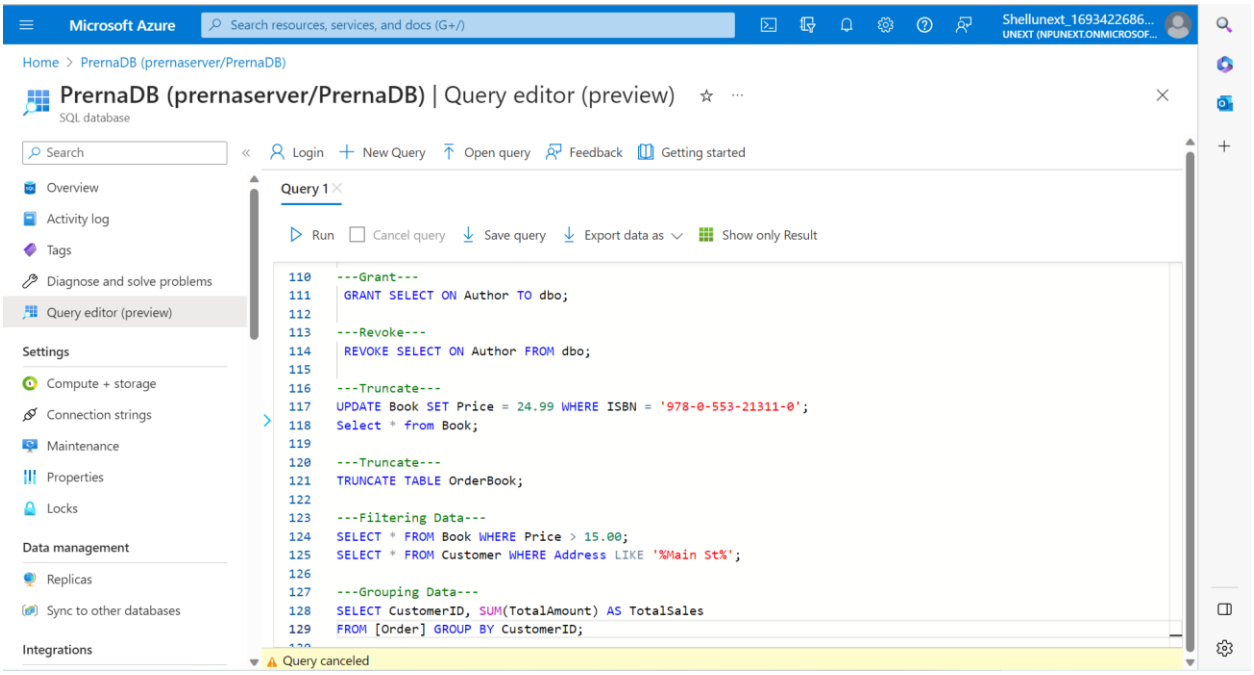




Creating SQL Database-



Performing Queries-



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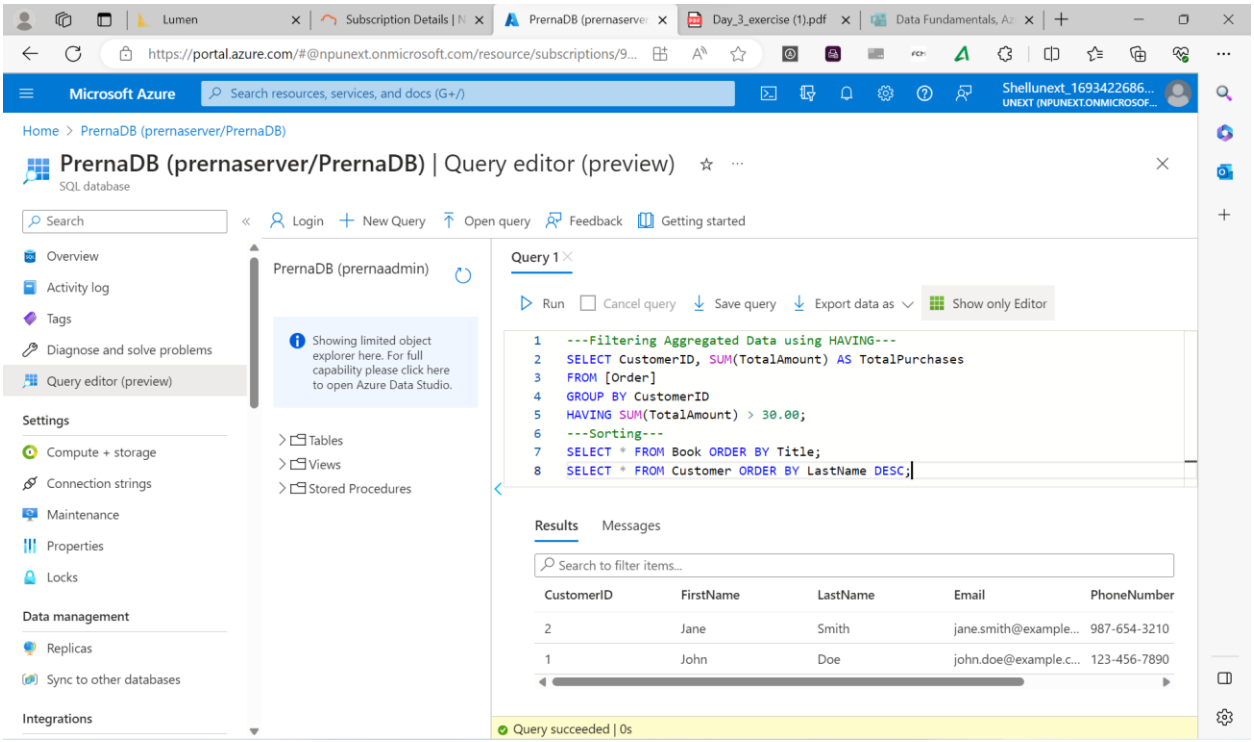

Exercise-

1)

```
CREATE TABLE DEPARTMENT(
DeptID INT PRIMARY KEY,
DeptName VARCHAR(30),
DeptCode VARCHAR(10)
);

DROP TABLE EMPLOYEE;
CREATE TABLE EMPLOYEE(
EmpID INT PRIMARY KEY,
EmpName VARCHAR(30) NOT NULL,
EmailID VARCHAR(20),
DeptID INT,
FOREIGN KEY(DeptID) REFERENCES DEPARTMENT(DeptID)
);
```

2)

```
CREATE TABLE DEPARTMENT(
```

```
DeptID INT PRIMARY KEY,
DeptName VARCHAR(30),
DeptCode VARCHAR(10)
);

DROP TABLE EMPLOYEE;
CREATE TABLE EMPLOYEE(
EmpID INT PRIMARY KEY,
EmpName VARCHAR(30) NOT NULL,
EmailID VARCHAR(20),
DeptID INT,
FOREIGN KEY(DeptID) REFERENCES DEPARTMENT(DeptID)
);


INSERT INTO DEPARTMENT VALUES (1001,'INFO, DATA AND ANALYTICS','IDA');
INSERT INTO DEPARTMENT VALUES (1002,'TRANSFORMATION CHANGE ANALYST','TCA');
INSERT INTO DEPARTMENT VALUES (1003,'BUSINESS ANALYSIS','BA');

INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'PRERNA','PRERNA@XYZ.COM','1001');
INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'OMSHREE','OM@XYZ.COM','1001');
INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'PRAKET','PRAK@XYZ.COM','1002');
INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'SIDDHARTH','SID@XYZ.COM','1002');
INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'SAKETH','SAKETH@XYZ.COM','1003');
INSERT INTO [dbo].[EMPLOYEE] VALUES (1,'SANJANA','SANJ@XYZ.COM','1003');

CREATE TABLE STUDENTS(
SLNO INT PRIMARY KEY,
ID INT,
SNAME VARCHAR(20),
SSUBJECT VARCHAR(20),
MARKS INT);

INSERT INTO STUDENTS VALUES(1,5030,'ASHLEY','DWH',50);
INSERT INTO STUDENTS VALUES(2,5031,'PRIYA','DWH',61);
INSERT INTO STUDENTS VALUES(3,5032,'JULIA','DWH',90);
INSERT INTO STUDENTS VALUES(4,5033,'DON','DWH',50);
INSERT INTO STUDENTS VALUES(5,5034,'BOB','DWH',65);

INSERT INTO STUDENTS VALUES(6,5030,'ASHLEY','SQL',75);
INSERT INTO STUDENTS VALUES(7,5031,'PRIYA','SQL',80);
INSERT INTO STUDENTS VALUES(8,5032,'JULIA','SQL',40);
INSERT INTO STUDENTS VALUES(9,5033,'DON','SQL',88);
```

```
INSERT INTO STUDENTS VALUES(10,5034,'BOB','SQL',92);
INSERT INTO STUDENTS VALUES(11,5030,'ASHLEY','AZURE',95);

INSERT INTO STUDENTS VALUES(12,5031,'PRIYA','AZURE',45);
INSERT INTO STUDENTS VALUES(13,5032,'JULIA','AZURE',85);
INSERT INTO STUDENTS VALUES(14,5033,'DON','AZURE',57);

INSERT INTO STUDENTS VALUES(15,5034,'BOB','AZURE',44);

SELECT * FROM STUDENTS;
```

--- Query 1 ---

```
select s1.s_name, s1.s_subject, s1.s_marks from students s1
join
(select s_subject, max(s_marks) as max_marks from students group by s_subject) s2
on (s1.s_subject = s2.s_subject and s1.s_marks = max_marks);
```

--- OR ---

```
with cte as (select dense_rank() over (partition by s_subject order by s_marks desc) xyz, s_subje
ct, s_marks, s_name from students)
select * from cte where xyz = 1;
```

--- Query 2 ---

```
select * from students order by s_subject asc, s_marks desc;
```

--- Query 3 ---

```
select * from students where s_marks<50;
```

--- Query 4 ---

```
select * from students where s_subject = 'Azure' order by s_marks desc;
```

--- Query 5 ---

```
select s_name, sum(s_marks) from students group by s_name;
```

--- Query 6 ---

```
select s_name, sum(s_marks) from students group by s_name order by sum(s_marks);
```

--- Query 7 ---

```
select s_subject, sum(s_marks) from students group by s_subject order by sum(s_marks);
```

--- Query 8 ---

```
with cte as (select dense_rank() over (partition by s_subject order by s_marks desc) xyz, s_subje
ct, s_marks, s_name from students)
select * from cte where xyz = 2;
```

--- Query 9 ---

```
select s1.s_name, s1.s_subject, s1.s_marks, s2.max_marks from students s1
join
(select s_subject, max(s_marks) as max_marks from students group by s_subject) s2
on (s1.s_subject = s2.s_subject);
```

--- Query 10 ---

```
select *, (left(s_name,3) + right(id,2) + '@ta.com') as email from students;
```