

Prerna Singh

DBMS Day-3

Emp Code- 654870

AZURE SQL

Creating SQL Server-

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and user information. The main content area displays the deployment progress for a resource named "Microsoft.SQLDatabase.newDatabaseNewServer_66abdc2ce9234f909efdd". The deployment is in progress, with a status of "Accepted". The deployment details table shows the following resources:

Resource	Type	Status
prernaserver/Client	Microsoft.Sql/servers/firewallrul	OK
prernaserver/Allow	Microsoft.Sql/servers/firewallrul	OK
prernaserver/Pr...	SQL database	Accepted
prernaserver/Defa	Microsoft.Sql/servers/connectio	OK
prernaserver	SQL server	OK
prernaserver	SQL server	Created

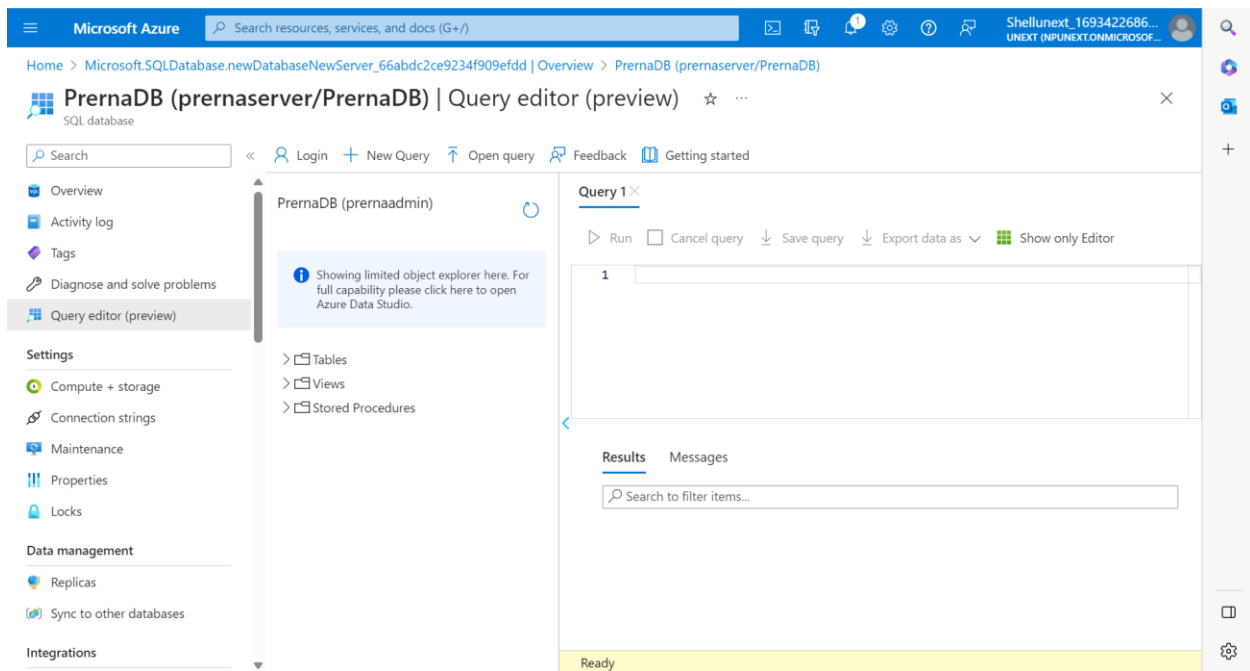
On the right side, there are recommendations for Microsoft Defender for Cloud, Free Microsoft tutorials, and Work with an expert.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the Microsoft Azure logo, a search bar, and user information. The main content area displays the deployment completion for a resource named "Microsoft.SQLDatabase.newDatabaseNewServer_66abdc2ce9234f909efdd". The deployment is complete, with a status of "OK". The deployment details table shows the following resources:

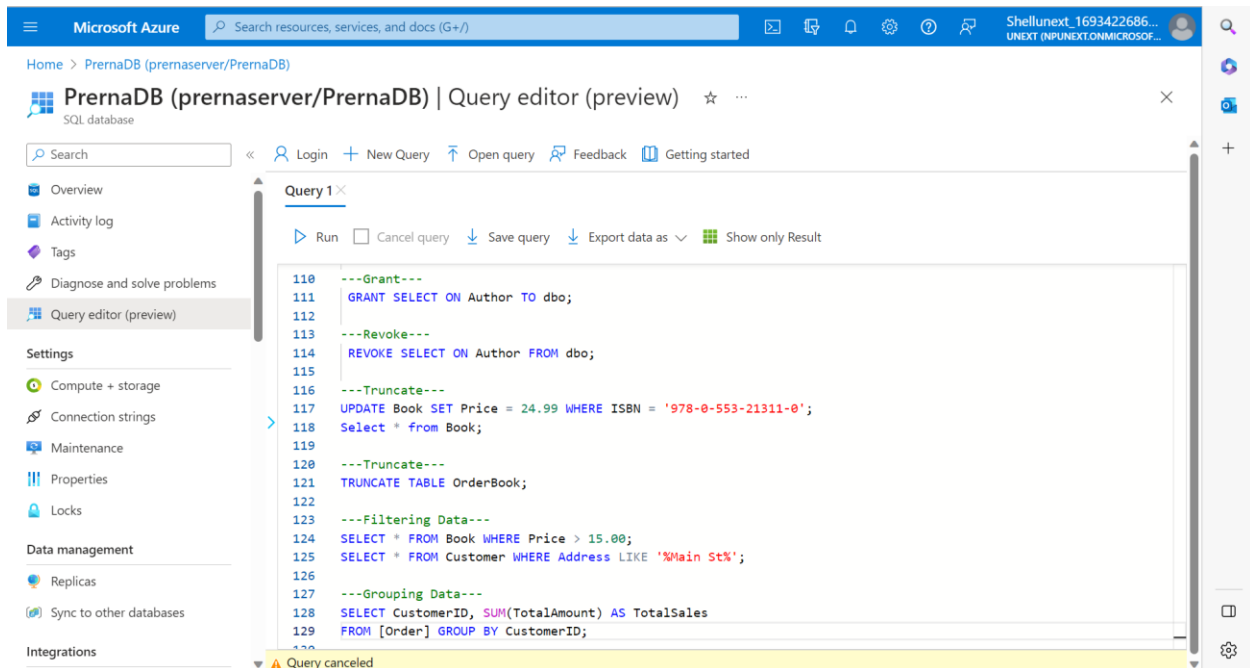
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Creating SQL Database-



Performing Queries-



Microsoft Azure | Search resources, services, and docs (G+)

Home > PrernaDB (prernaserver/PrernaDB)

PrernaDB (prernaserver/PrernaDB) | Query editor (preview)

Search

Overview, Activity log, Tags, Diagnose and solve problems, Query editor (preview)

Settings: Compute + storage, Connection strings, Maintenance, Properties, Locks, Data management (Replicas, Sync to other databases), Integrations

PrernaDB (prernaadmin)

Showing limited object explorer here. For full capability please click here to open Azure Data Studio.

Tables, Views, Stored Procedures

Query 1

Run, Cancel query, Save query, Export data as, Show only Editor

```

1 ---Filtering Aggregated Data using HAVING---
2 SELECT CustomerID, SUM(TotalAmount) AS TotalPurchases
3 FROM [Order]
4 GROUP BY CustomerID
5 HAVING SUM(TotalAmount) > 30.00;
6 ---Sorting---
7 SELECT * FROM Book ORDER BY Title;
8 SELECT * FROM Customer ORDER BY LastName DESC;

```

Results Messages

Search to filter items...

CustomerID	FirstName	LastName	Email	PhoneNumber
2	Jane	Smith	jane.smith@example...	987-654-3210
1	John	Doe	john.doe@example.c...	123-456-7890

Query succeeded | 0s

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;
```