**Class Test 06**

Create the tables given below with all given specifications and insert the given data in the created tables. Here S\_Id, H\_Id are the ***primary key columns*** of Student and House table respectively. Student table also has a ***foreign key*** column H\_No.

**Table: Student Table: House**

|  |  |  |
| --- | --- | --- |
| S\_Id | S\_Name | **H\_No** |
| 2 | Harry | 11 |
| 7 | Ron | 11 |
| 12 | Hannah | 22 |
| 17 | Cedric | 22 |
| 22 | Cho | 33 |
| 27 | Luna | 33 |
| 32 | Draco | 44 |
| 37 | Goyle | 44 |

|  |  |
| --- | --- |
| H\_Id | H\_Name |
| 11 | Gryffindor |
| 22 | Hufflepuf |
| 33 | Ravenclaw |
| 44 | Slytherin |
| 55 | Harry |

1. Create a ***sequence*** that has initial value 2, increments by 5, whose maximum value is 97 and which has neither cache nor cycle. You must use the sequence to assign values to S\_Id i.e. the primary key column of the Student table.
2. Create an ***index*** on S\_Id and S\_Name columns from Student table.
3. Write a subquery that displays those students who have IDs that are greater than Cedric’s.
4. Write a join query that displays the Student Name and House Name of each student.
5. Create a ***view*** consisting of only S\_Name column from Student table.
6. Write a query that ***deletes*** the created view. Make sure to untick the auto commit option before deleting the view.
7. Using ***rollback*** re-create the deleted view.
8. Create a synonym for the view you created earlier.

Answer:

CREATE TABLE House (

H\_Id INT PRIMARY KEY,

H\_Name VARCHAR(50)

);

CREATE TABLE Student (

S\_Id INT PRIMARY KEY,

S\_Name VARCHAR(50),

H\_No INT,

FOREIGN KEY (H\_No) REFERENCES House(H\_Id)

);

INSERT INTO House (H\_Id, H\_Name) VALUES (11, 'Gryffindor');

INSERT INTO House (H\_Id, H\_Name) VALUES (22, 'Hufflepuff');

INSERT INTO House (H\_Id, H\_Name) VALUES (33, 'Ravenclaw');

INSERT INTO House (H\_Id, H\_Name) VALUES (44, 'Slytherin');

INSERT INTO House (H\_Id, H\_Name) VALUES (55, 'Harry');

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (2, 'Harry', 11);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (7, 'Ron', 11);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (12, 'Hannah', 22);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (17, 'Cedric', 22);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (22, 'Cho', 33);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (27, 'Luna', 33);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (32, 'Draco', 44);

INSERT INTO Student (S\_Id, S\_Name, H\_No) VALUES (37, 'Goyle', 44);

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1. CREATE SEQUENCE Student

START WITH 2

INCREMENT BY 5

MAXVALUE 97

NOCACHE

NOCYCLE;

2. CREATE INDEX idx\_student\_id\_name ON Student (S\_Id, S\_Name);

3. SELECT \*

FROM Student

WHERE S\_Id > (

SELECT S\_Id

FROM Student

WHERE S\_Name = 'Cedric'

);

4. SELECT S.S\_Name, H.H\_Name

FROM Student S

JOIN House H ON S.H\_No = H.H\_Id;

5. CREATE VIEW StudentNames AS

SELECT S\_Name

FROM Student;

6. DROP VIEW StudentNames;

7. ROLLBACK;

SELECT \* FROM StudentNames;

8. CREATE SYNONYM StudentNamesSyn FOR StudentNames;