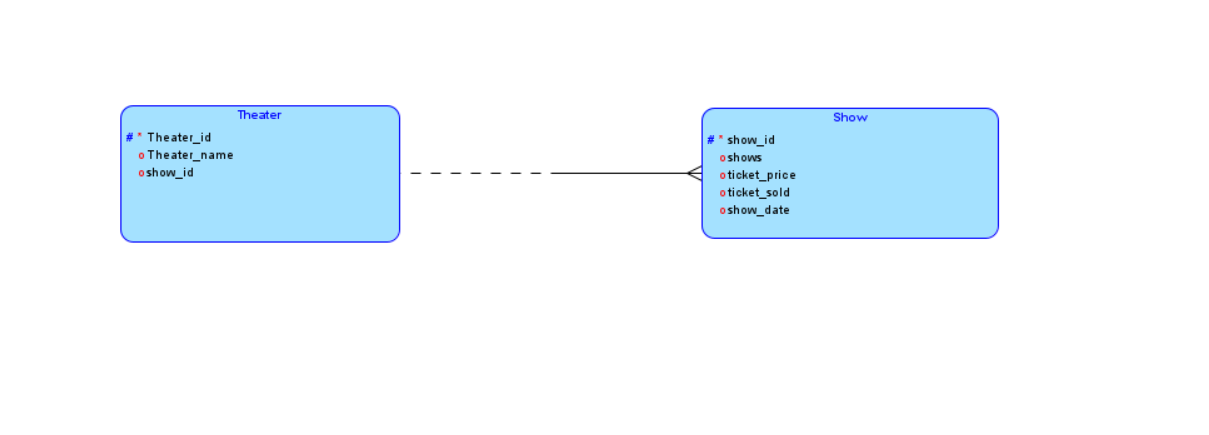
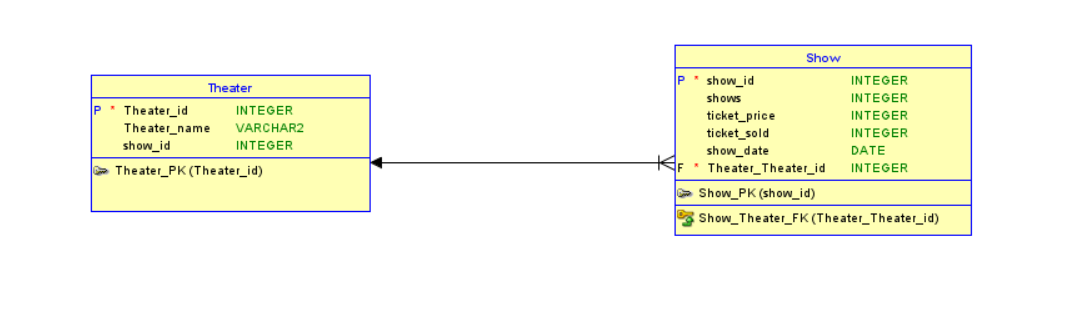
**Automated ticket generator for calculating profit or loss by date**

**(i) Create a conceptual model (ii) implement database using SQL (iii) use PL/SQL**

(i)Physical Model



Relational Model



(ii)

CREATE TABLE Theater(theater\_id NUMBER PRIMARY KEY,theater\_name VARCHAR2(20),show\_id NUMBER);

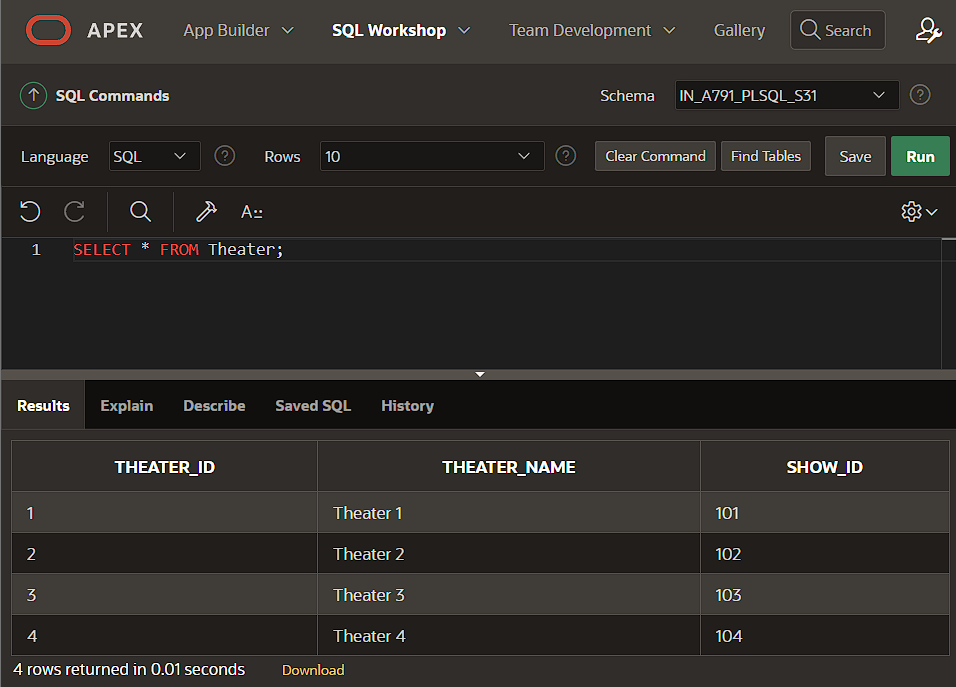
INSERT INTO Theater VALUES(1,'Theater 1',101);

INSERT INTO Theater VALUES(2,'Theater 2',102);

INSERT INTO Theater VALUES(3,'Theater 3',103);

INSERT INTO Theater VALUES(4,'Theater 4',104);

SELECT \* FROM Theater;



CREATE TABLE show(show\_id NUMBER PRIMARY KEY,shows NUMBER,ticket\_price NUMBER,ticket\_sold NUMBER,show\_date DATE,theater\_id NUMBER,FOREIGN KEY (theater\_id) REFERENCES Theater(theater\_id));

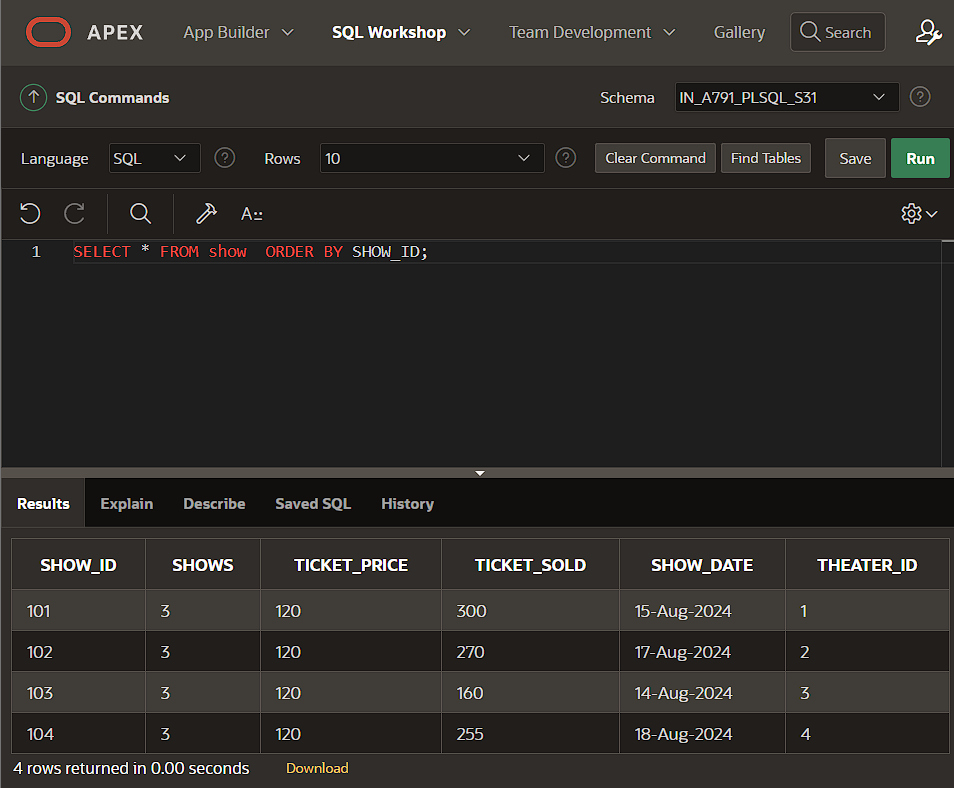
INSERT INTO show VALUES(101,3,120,300,TO\_DATE('2024-08-15', 'YYYY-MM-DD'),1);

INSERT INTO show VALUES(102,3,120,270,TO\_DATE('2024-08-17', 'YYYY-MM-DD'),2);

INSERT INTO show VALUES(103,3,120,160,TO\_DATE('2024-08-14', 'YYYY-MM-DD'),3);

INSERT INTO show VALUES(104,3,120,255,TO\_DATE('2024-08-18', 'YYYY-MM-DD'),4);

SELECT \* FROM show ORDER BY SHOW\_ID;



(iii)

CREATE OR REPLACE PROCEDURE Calculate\_Profit\_Loss IS

income NUMBER;

expenses NUMBER := 90000;

r NUMBER;

profit\_loss VARCHAR2(20);

CURSOR c1 IS

SELECT s.shows,s.ticket\_sold,s.ticket\_price,s.show\_date,t.theater\_name,t.show\_id FROM Show s JOIN Theater t ON s.theater\_id = t.theater\_id;

BEGIN

FOR s IN c1 LOOP

income := s.ticket\_sold \* s.ticket\_price \* s.shows;

r:= income - expenses;

IF r>0 THEN

profit\_loss := 'Profit';

ELSE

profit\_loss := 'Loss';

END IF;

DBMS\_OUTPUT.PUT\_LINE('Show Date: '||TO\_CHAR(s.show\_date, 'YYYY-MM-DD')||' | Theater: '||s.theater\_name||' | Net Profit/Loss: '||profit\_loss);

END LOOP;

END;

/

BEGIN

Calculate\_Profit\_Loss;

END;

/

