

## [TP-3] DDL

2025. 04. 25  
202000826 김연범

### 1. Airplain

#### (1) SQL 및 실행 결과

The screenshot displays the Oracle SQL Developer interface. On the left, the 'Oracle 접속' (Oracle Connection) pane shows a tree view of the database schema, including tables like ACCOUNT, AIRPLAIN, DEPT, EMP, NEW\_SCHOOL, PLAYER, SCHEDULE, SCHOOL, STADIUM, and TEAM. The 'AIRPLAIN' table is highlighted. Below this, the '보고서' (Reports) pane lists various report types such as Application Express, ASH 및 AWR, Data Modeler 보고서, OLAP 보고서, PLSQL, TimesTen 보고서, XML, and others. The main workspace on the right is titled '워크시트' (Worksheet) and shows the SQL statement for creating the AIRPLAIN table. The statement is as follows:

```
CREATE TABLE Airplain(  
    airline VARCHAR2(10),  
    flightNo VARCHAR2(10),  
    departureDateTime DATE,  
    departureAirport VARCHAR2(10),  
    arrivalDateTime DATE,  
    arrivalAirport VARCHAR2(10),  
    CONSTRAINT AIRPLAIN_PK PRIMARY KEY(flightNo, departureDateTime)  
);
```

At the bottom of the interface, a status bar indicates the execution result: '작업이 완료되었습니다.(0.044초)' (Work completed in 0.044 seconds). Below this, a message states: 'Table AIRPLAIN이 (가) 생성되었습니다.' (Table AIRPLAIN has been created).

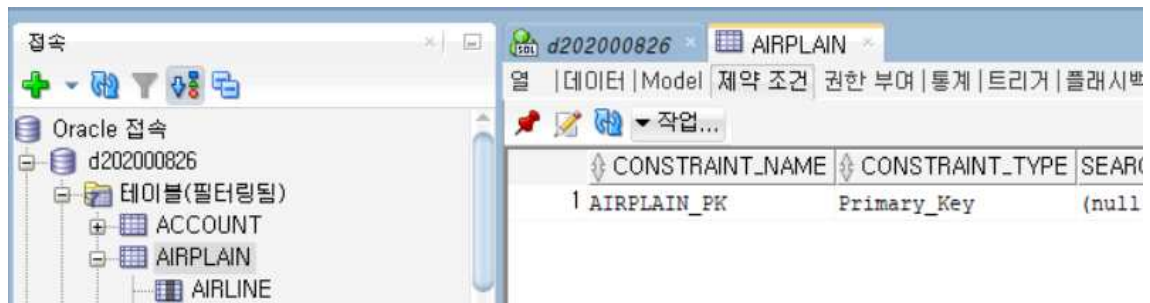
## (2) 테이블 구조



The screenshot shows the Oracle SQL Developer interface. On the left, the 'Object Explorer' pane displays the database structure, including the 'AIRPLAIN' table. The main window shows the 'Table Structure' tab for the 'AIRPLAIN' table. The table has 6 columns: AIRLINE, FLIGHTNO, DEPARTUREDATETIME, DEPARTUREAIRPORT, ARRIVALDATETIME, and ARRIVALAIRPORT. The columns are listed in a table with their respective data types, nullability, default values, and comments.

Column ID	Column Name	Data Type	Nullable	Data Default	Column ID	Comments
1	AIRLINE	VARCHAR2(10 BYTE)	Yes	(null)	1	(null)
2	FLIGHTNO	VARCHAR2(10 BYTE)	No	(null)	2	(null)
3	DEPARTUREDATETIME	DATE	No	(null)	3	(null)
4	DEPARTUREAIRPORT	VARCHAR2(10 BYTE)	Yes	(null)	4	(null)
5	ARRIVALDATETIME	DATE	Yes	(null)	5	(null)
6	ARRIVALAIRPORT	VARCHAR2(10 BYTE)	Yes	(null)	6	(null)

## (3) 제약 조건



The screenshot shows the Oracle SQL Developer interface with the 'AIRPLAIN' table selected. The 'Constraints' tab is active, showing a list of constraints. There is one constraint named 'AIRPLAIN\_PK' of type 'Primary\_Key'.

Constraint Name	Constraint Type	Search Condition
AIRPLAIN_PK	Primary_Key	(null)

## 2. Seats

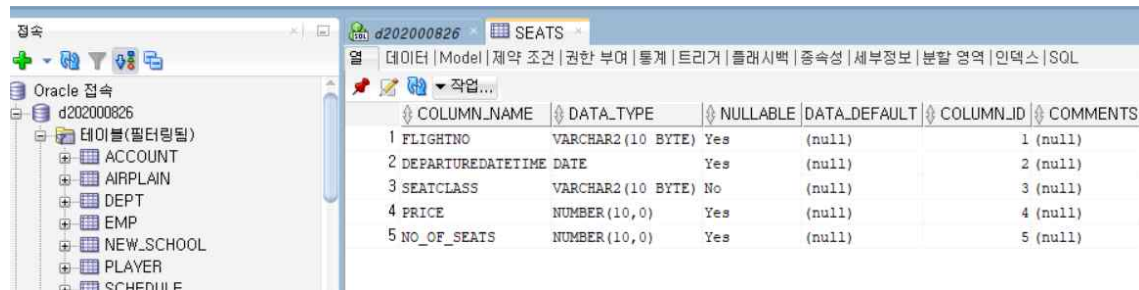
### (1) SQL 및 실행 결과

The screenshot displays the Oracle SQL Developer interface. On the left, the 'Object Explorer' shows the database structure for 'd202000826', including tables like ACCOUNT, AIRPLAIN, DEPT, EMP, NEW\_SCHOOL, PLAYER, SCHEDULE, SCHOOL, and SEATS. The 'SEATS' table is expanded, showing columns: FLIGHTNO, DEPARTUREDATETIME, SEATCLASS, PRICE, and NO OF SEATS. The 'Script' window on the right contains the following SQL code:

```
CREATE TABLE Seats(  
    flightNo VARCHAR2(10),  
    departureDateTime DATE,  
    seatClass VARCHAR2(10),  
    price NUMBER(10),  
    no_of_seats NUMBER(10),  
    CONSTRAINT SEATS_PK PRIMARY KEY(seatClass),  
    CONSTRAINT SEATS_FLIGHT_NO_FK FOREIGN KEY(flightNo, departureDateTime) REFERENCES AIRPLAIN(flightNo, departureDateTime)  
);
```

At the bottom, a status bar indicates '작업이 완료되었습니다. (0.066초)' (Work completed. (0.066 seconds)). Below the status bar, a message states 'Table SEATS이 (가) 생성되었습니다.' (Table SEATS has been created).

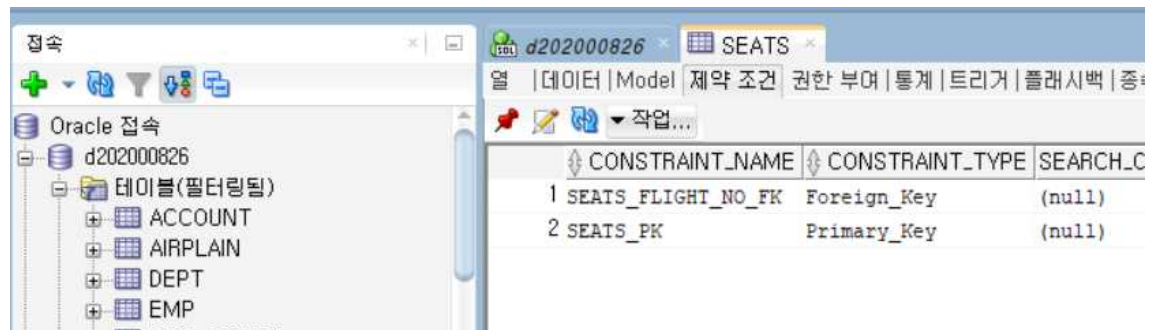
## (2) 테이블 구조



The screenshot shows the Oracle SQL Developer interface. On the left, the 'Connections' pane shows a connection to 'd202000826'. The 'Tables' pane shows a list of tables including ACCOUNT, AIRPLAIN, DEPT, EMP, NEW\_SCHOOL, PLAYER, and SCHEDULE. The main pane displays the 'SEATS' table structure with the following columns:

Column Name	Data Type	Nullable	Default	Column ID	Comments
1 FLIGHTNO	VARCHAR2(10 BYTE)	Yes	(null)	1	(null)
2 DEPARTUREDATETIME	DATE	Yes	(null)	2	(null)
3 SEATCLASS	VARCHAR2(10 BYTE)	No	(null)	3	(null)
4 PRICE	NUMBER(10,0)	Yes	(null)	4	(null)
5 NO_OF_SEATS	NUMBER(10,0)	Yes	(null)	5	(null)

## (3) 제약 조건



The screenshot shows the Oracle SQL Developer interface with the 'SEATS' table selected. The 'Constraints' tab is active, showing the following constraints:

Constraint Name	Constraint Type	Search Condition
1 SEATS_FLIGHT_NO_FK	Foreign_Key	(null)
2 SEATS_PK	Primary_Key	(null)

### 3. Customer

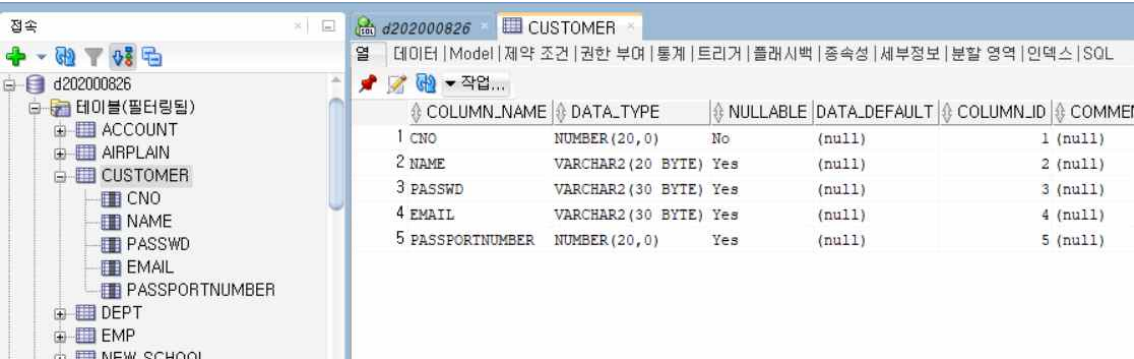
#### (1) SQL 및 실행 결과

The screenshot displays the Oracle SQL Developer interface. On the left, the '정적' (Static) pane shows a database connection 'd202000826' with a tree of tables. The 'CUSTOMER' table is selected, showing its columns: CNO, NAME, PASSWD, EMAIL, and PASSPORTNUMBER. Below this, the '보고서' (Reports) pane lists various report types. The main workspace, titled '워크시트' (Worksheet) and '질의 작성기' (Query Editor), contains the following SQL code:

```
CREATE TABLE Customer(  
  cno number(20),  
  name VARCHAR(20),  
  passwd VARCHAR(30),  
  email VARCHAR(30),  
  passportNumber NUMBER(20),  
  CONSTRAINT CUSTOMER_PK PRIMARY KEY(cno)  
);
```

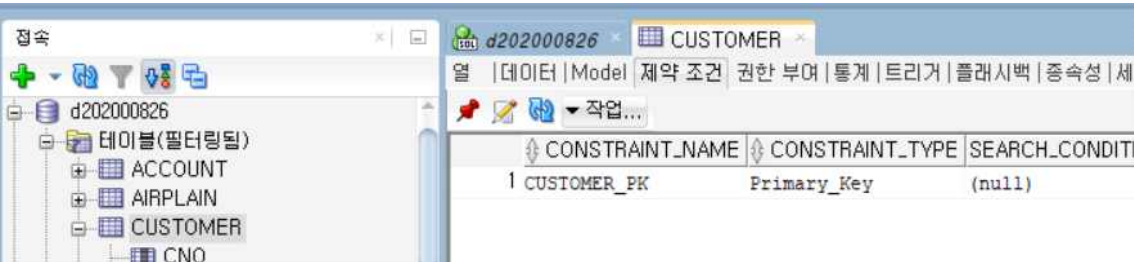
At the bottom, a '스크립트 출력' (Script Output) window shows the execution result: '작업이 완료되었습니다.(0.045초)' (Job completed in 0.045 seconds) and 'Table CUSTOMER이 (가) 생성되었습니다.' (Table CUSTOMER has been created).

(2) 테이블 구조



COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENT
1 CNO	NUMBER(20,0)	No	(null)	1 (null)	
2 NAME	VARCHAR2(20 BYTE)	Yes	(null)	2 (null)	
3 PASSWD	VARCHAR2(30 BYTE)	Yes	(null)	3 (null)	
4 EMAIL	VARCHAR2(30 BYTE)	Yes	(null)	4 (null)	
5 PASSPORTNUMBER	NUMBER(20,0)	Yes	(null)	5 (null)	

(3) 제약 조건



CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION
1 CUSTOMER_PK	Primary_Key	(null)

## 4. Reserve

### (1) SQL 및 실행 결과

The screenshot displays the Oracle SQL Developer interface. On the left, the 'Oracle 접속' (Oracle Connection) pane shows a tree view of the database schema, including tables like ACCOUNT, AIRPLAIN, CUSTOMER, DEPT, EMP, NEW\_SCHOOL, PLAYER, RESERVE, SCHEDULE, SCHOOL, SEATS, STADIUM, and TEAM. The '보고서' (Reports) pane on the right lists various report types such as Application Express, ASH 및 AWR, Data Modeler 보고서, OLAP 보고서, PLSQL, TimesTen 보고서, XML, 데이터 디렉터리, 데이터 디렉터리 보고서, 데이터베이스 관리, 데이터베이스 정보, 모든 객체, 보안, 분석 뷰 보고서, 사용자정의 보고서, and 스트림.

The main workspace, titled 'RESERVE', contains the following SQL code for creating the table:

```
CREATE TABLE Reserve(  
    flightNo VARCHAR2(10),  
    departureDateTime DATE,  
    seatClass VARCHAR2(10),  
    payment NUMBER(10),  
    reserveDateTime DATE,  
    cno number(20),  
    CONSTRAINT RESERVE_CNO_FK FOREIGN KEY(cno) REFERENCES CUSTOMER(cno),  
    CONSTRAINT RESERVE_AIRPLAIN_FK FOREIGN KEY(flightNo, departureDateTime) REFERENCES AIRPLAIN(flightNo, departureDateTime),  
    CONSTRAINT RESERVE_SEATS_FK FOREIGN KEY(seatClass) REFERENCES Seats(seatClass)  
);
```

At the bottom, a status bar indicates the execution results: '작업이 완료되었습니다. (0.058초)' (Work completed. (0.058 seconds)) and 'Table RESERVE이 (가) 생성되었습니다.' (Table RESERVE has been created).

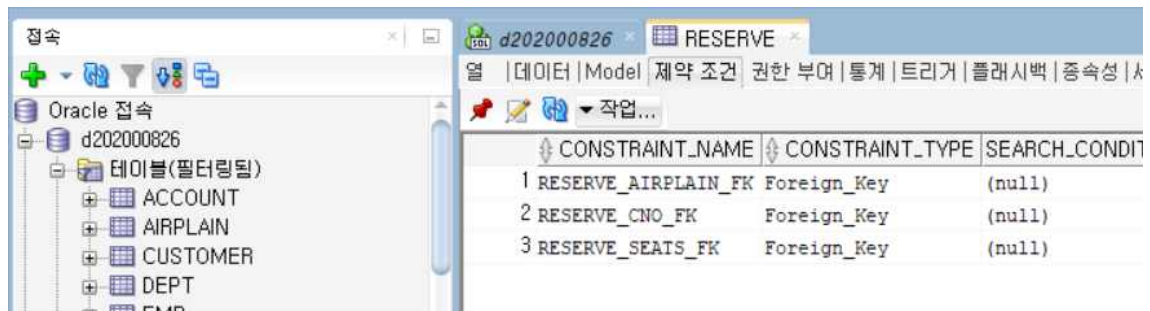
## (2) 테이블 구조



The screenshot shows the Oracle SQL Developer interface. On the left, a tree view displays the database structure under 'd202000826', including tables like ACCOUNT, AIRPLAIN, CUSTOMER, DEPT, EMP, NEW\_SCHOOL, PLAYER, RESERVE, SCHEDULE, SCHOOL, and SEATS. The main pane shows the 'RESERVE' table structure with the following columns:

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1 FLIGHTNO	VARCHAR2(10 BYTE)	Yes	(null)	1	(null)
2 DEPARTUREDATETIME	DATE	Yes	(null)	2	(null)
3 SEATCLASS	VARCHAR2(10 BYTE)	Yes	(null)	3	(null)
4 PAYMENT	NUMBER(10,0)	Yes	(null)	4	(null)
5 RESERVEDATETIME	DATE	Yes	(null)	5	(null)
6 CNO	NUMBER(20,0)	Yes	(null)	6	(null)

## (3) 제약 조건



The screenshot shows the Oracle SQL Developer interface with the 'RESERVE' table selected. The main pane displays the constraints for the table:

CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH_CONDITION
1 RESERVE_AIRPLAIN_FK	Foreign_Key	(null)
2 RESERVE_CNO_FK	Foreign_Key	(null)
3 RESERVE_SEATS_FK	Foreign_Key	(null)



## 5. Cancel

### (1) SQL 및 실행 결과

The screenshot displays the Oracle SQL Developer interface. On the left, the 'Oracle 접속' (Oracle Connection) pane shows a tree view of the database schema, including tables like ACCOUNT, AIRPLAIN, CANCEL, FLIGHTNO, DEPARTUREDATETIME, SEATCLASS, REFUND, CANCELDATE, CNO, CUSTOMER, DEPT, EMP, NEW\_SCHOOL, and PLAYER. The 'CANCEL' table is highlighted. Below this, the '보고서' (Reports) pane lists various report types such as Application Express, ASH 및 AWR, Data Modeler 보고서, OLAP 보고서, PLSQL, TimesTen 보고서, XML, 데이터 디렉터리, 데이터베이스 관리, 데이터베이스 정보, 모든 객체, 보안, 분석 뷰 보고서, and 사용자정의 보고서.

The main workspace, titled 'd202000826 CANCEL', shows the SQL script for creating the 'CANCEL' table. The script is as follows:

```
CREATE TABLE Cancel(  
    flightNo VARCHAR2(10),  
    departureDateTime DATE,  
    seatClass VARCHAR2(10),  
    refund NUMBER(10),  
    cancelDateTime DATE,  
    cno number(20),  
    CONSTRAINT CANCEL_CNO_FK FOREIGN KEY(cno) REFERENCES CUSTOMER(cno),  
    CONSTRAINT CANCEL_AIRPLAIN_FK FOREIGN KEY(flightNo, departureDateTime) REFERENCES AIRPLAIN(flightNo, departureDateTime),  
    CONSTRAINT CANCEL_SEATS_FK FOREIGN KEY(seatClass) REFERENCES Seats(seatClass)  
);
```

At the bottom of the workspace, a status bar indicates that the operation was successful: '작업이 완료되었습니다. (0.049초)' (Operation completed. (0.049 seconds)). Below this, a message states: 'Table CANCEL이 (가) 생성되었습니다.' (Table CANCEL has been created).

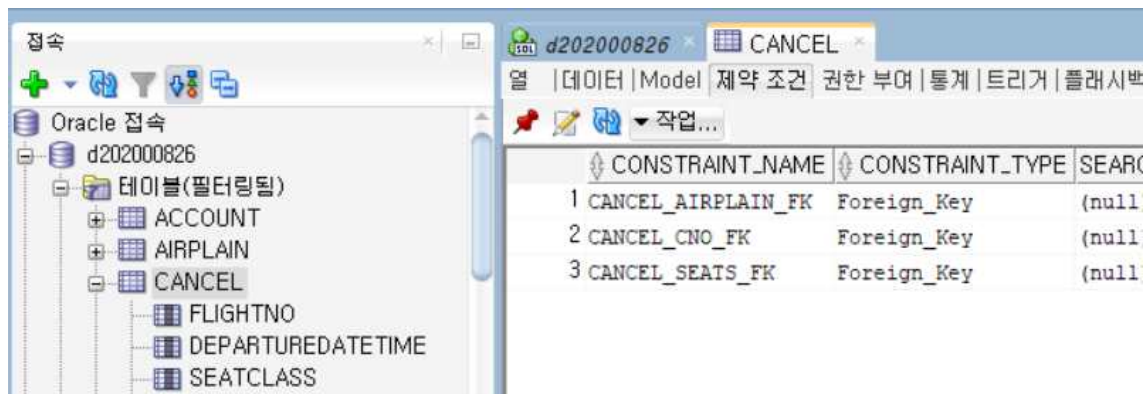
## (2) 테이블 구조



The screenshot shows the Oracle SQL Developer interface. On the left, the '정숙' (Structure) pane displays the database schema for 'd202000826', including tables like ACCOUNT, AIRPLAIN, CANCEL, FLIGHTNO, DEPARTUREDATETIME, SEATCLASS, REFUND, CANCELDATETIME, CNO, CUSTOMER, DEPT, and EMP. The 'CANCEL' table is selected. The main pane shows the 'COLUMN\_NAME' tab for the 'CANCEL' table, displaying the following columns:

COLUMN_NAME	DATA_TYPE	NULLABLE	DATA_DEFAULT	COLUMN_ID	COMMENTS
1 FLIGHTNO	VARCHAR2(10 BYTE)	Yes	(null)	1 (null)	
2 DEPARTUREDATETIME	DATE	Yes	(null)	2 (null)	
3 SEATCLASS	VARCHAR2(10 BYTE)	Yes	(null)	3 (null)	
4 REFUND	NUMBER(10,0)	Yes	(null)	4 (null)	
5 CANCELDATETIME	DATE	Yes	(null)	5 (null)	
6 CNO	NUMBER(20,0)	Yes	(null)	6 (null)	

## (3) 제약 조건



The screenshot shows the Oracle SQL Developer interface with the 'CANCEL' table selected. The main pane shows the 'CONSTRAINT\_NAME' tab, displaying the following constraints:

CONSTRAINT_NAME	CONSTRAINT_TYPE	SEARCH
1 CANCEL_AIRPLAIN_FK	Foreign_Key	(null)
2 CANCEL_CNO_FK	Foreign_Key	(null)
3 CANCEL_SEATS_FK	Foreign_Key	(null)