

Oracle	Name:
Practice	Class:
if train	Date:

Create the following TABLES:

WAGON		
WAGON_ID	INTEGER	PK
WAGON_CLASS	INTEGER	
SEATS	INTEGER	
TRAIN_ID	INTEGER	FK

TRAIN		
TRAIN_ID	INTEGER	PK
DEPARTURE_TIME	TIME	
STATION_FROM	VARCHAR(30)	
STATION_TO	VARCHAR(30)	
PRICE_FIRST	DECIMAL(6,2)	
PRICE_SECOND	DECIMAL(6,2)	

CUSTOMER		
CUSTOMER_ID	INTEGER	PK
FIRSTNAME	VARCHAR(30)	
FIRST_CLASS	CHAR(1)	
CASH	DECIMAL(10,2)	
WAGON_ID	INTEGER	FK

TICKET		
TICKET_ID	INTEGER	PK
CUSTOMER_ID	INTEGER	FK
BUY_DATE	DATE	
PRICE	DECIMAL(6,2)	
VALID	CHAR(1)	

Add data for testing.

Create a new PL/SQL function for boarding:

```
boarding(CUSTOMER_ID IN, STATION_FROM IN, STATION_TO IN,
         DEPARTURE_TIME OUT)
=> return TICKET_ID (sequence)
```

Check:

- Is the CUSTOMER_ID valid?
- Is the customer currently not in a train?
- Is there a train after the current time?
- Is there a seat (WAGON_CLASS) left in the train?
- Has the customer enough money left?

```
Train
ID TIME FROM TO 1st 2nd
20 18:00 Wien Baden 10€ 6€
```

```
Train
ID TIME FROM TO 1st 2nd
20 18:00 Wien Baden 10€ 6€
```

```
Wagon
ID CLASS SEATS TRAIN_ID
5 2 3 20
6 2 4 20
```

```
Wagon
ID CLASS SEATS TRAIN_ID
5 2 3 20
6 2 4 20
```

```
Customer
ID NAME FIRST CASH WAGON_ID
1 Alex N 33€ NULL
```

```
Customer
ID NAME FIRST CASH WAGON_ID
1 Alex N 27€ 5
```

Ticket			
ID	CUS	BUY	PRICE
1000	1	today	6€

Ticket				
ID	CUS	BUY	PRICE	VALID
1000	1	today	6€	Y

SEQUENCE current value: 999

```
boarding(1, Wien, Baden, DEPARTURE_TIME)
DEPARTURE_TIME 18:00
=> return 1000
```

Create a new PL/SQL function for deboarding:

```
deboarding(CUSTOMER_ID)
=> return STATION_TO
```

Check:

- Is the CUSTOMER_ID valid?
- Is the customer currently in a train?

Train				
ID	TIME	FROM	TO	1st 2nd
20	18:00	Wien	Baden	10€ 6€

Train				
ID	TIME	FROM	TO	1st 2nd
20	18:00	Wien	Baden	10€ 6€

Wagon			
ID	CLASS	SEATS	TRAIN_ID
5	2	3	20
6	2	4	20

Wagon			
ID	CLASS	SEATS	TRAIN_ID
5	2	3	20
6	2	4	20

Customer				
ID	NAME	FIRST	CASH	WAGON_ID
1	Alex	N	27€	5

Customer				
ID	NAME	FIRST	CASH	WAGON_ID
1	Alex	N	27€	NULL

Ticket				
ID	CUS	BUY	PRICE	VALID
1000	1	today	6€	Y

Ticket				
ID	CUS	BUY	PRICE	VALID
1000	1	today	6€	N

```
deboarding(1)
=> return Baden
```