

# João Paulo Oliveira Cruz

## Database Systems Management

### Practice Exercise 02

Complete code for the whole assignment can be found [here](#).

#### 1

##### a

```
PARTITION BY RANGE (age) (  
    PARTITION young VALUES LESS THAN (18),  
    PARTITION adult VALUES LESS THAN (60),  
    PARTITION elder VALUES LESS THAN (MAXVALUE)  
);
```

##### b

```
create table accounts (  
    accountNumber number constraint accounts_pk primary key,  
    accountUser number not null,  
    interestRate number,  
    openingDate date,  
    status varchar2(10) CHECK (status = 'Active' or status = 'Hold' or status =  
'Closed'),  
    balance number,  
    accountType varchar2(3) CHECK (accountType = 'OD' or accountType = 'NOD'),  
    CONSTRAINT fk_accountUser  
    FOREIGN KEY (accountUser) REFERENCES CUSM(custid)  
)  
PARTITION BY REFERENCE (fk_accountUser);
```

##### c

```
CREATE VIEW young AS  
SELECT * from CUSM where (age < 19) ORDER BY age;  
  
CREATE VIEW adult AS  
SELECT * from CUSM where (age >= 19) and (age < 60) ORDER BY age;  
  
CREATE VIEW elder AS  
SELECT * from CUSM where (age >= 60) ORDER BY age;  
  
CREATE VIEW viewofACTM AS  
SELECT accountNumber FROM accounts;
```

## 2

```
INSERT ALL
  INTO CUSM (fullName, address, age, sex, phone, email, status) VALUES ('Pablo
Rodriguez', 'City Center', 34, 'm', '041 462 5793', 'pablo.rodriguez@gmail.com',
'Dormant')
  INTO accounts (accountUser, interestRate, openingDate, status, balance,
accountType) VALUES (4, 15, '2010-03-11', 'Closed', 0, 'NOD')
  SELECT * FROM dual;
```

## 3

**a**

```
SELECT * FROM
  (SELECT * FROM CUSM PARTITION (elder)
  ORDER BY age desc)
WHERE ROWNUM < 2;
```

**b**

```
CREATE VIEW view_03b AS
SELECT CUSM.custid, accounts.accountUser, accounts.accountNumber
FROM CUSM
INNER JOIN accounts ON CUSM.custid = accounts.accountUser

SELECT COUNT(accountNumber) FROM view_03b WHERE custid = 1
```

**c**

```
SELECT COUNT(*) FROM
  (SELECT CUSM.custid, accounts.accountNumber, accounts.accountUser FROM CUSM
PARTITION (adult)
  INNER JOIN accounts ON CUSM.custid = accounts.accountUser);
```