

```
SQL> -- question 1
SQL> select C.Name from Customer C
SQL> where exists
SQL> (select * from Account A
SQL> where C.C# = A.C#);
```

NAME

Adams

Blake

Clark

Jones

```
SQL> _
```

```
SQL> -- question 2
SQL> select C.Name, B.Name from Customer C, Bank B
SQL> where not exists
SQL> (select * from Account A
SQL> where C.C# = A.C# and A.B# = B.B#);
```

NAME	NAME
Smith	England
Smith	America
Clark	Royal
Jones	Royal
Smith	Royal
Blake	France
Clark	France
Jones	France
Smith	France

9 rows selected.

```
SQL> _
```

```
SQL> -- question 3
SQL> select C.Name from Customer C
SQL> where not exists
SQL> (select * from Account A
SQL> where C.C# = A.C#);
```

```
NAME
```

```
-----
```

```
Smith
```

```
SQL>
```

```
SQL> -- question 4
SQL> select B.Name from Bank B
SQL> where exists
SQL> (select * from Account A, Customer C
SQL> where C.Name = 'Blake' and C.C# = A.C# and A.B# = B.B#)
SQL> union
SQL> select B.Name from Bank B
SQL> where exists
SQL> (select * from Account A, Customer C
SQL> where C.Name = 'Clark' and C.C# = A.C# and A.B# = B.B#);
```

NAME

America
England
Royal

SQL> _

```
SQL> -- question 5
SQL> select C.Name from Customer C
SQL> where not exists
SQL> (select * from Bank B
SQL> where not exists
SQL> (select * from Account A
SQL> where C.C# = A.C# and A.B# = B.B#));
```

NAME

Adams

```
SQL> _
```

```
SQL> SELECT C.name FROM Customer C WHERE NOT EXISTS
SQL>      (SELECT * FROM Bank B WHERE
SQL>      (B.name NOT IN ('Royal', 'France')
SQL>      OR EXISTS
SQL>      (SELECT * FROM Account A WHERE C.c# = A.c# AND B.b# = A.b#))
SQL> AND
SQL>      (B.name IN ('Royal', 'France') OR NOT EXISTS
SQL>      (SELECT * FROM Account A WHERE C.c# = A.c# AND B.b# = A.b#)));
```

NAME

Clark
Jones

SQL>

```
SQL> -- question 7
SQL> select C3.Name from Customer C3, Customer C
SQL> where C3.Name != 'Clark' and C.Name = 'Clark' and exists
SQL>     (select * from Bank B, Account A1, Account A
SQL>      where C.C# = A.C# and A.B# = B.B#
SQL>      and C3.C# = A1.C# and A1.B# = B.B#);
```

NAME

Adams
Blake
Jones

SQL> _

```
SQL> -- question 8
SQL> select C3.Name from Customer C3, Customer C
SQL> where C3.Name != 'Clark' and C.Name = 'Clark' and NOT exists
SQL>     (select * FROM Bank B
SQL>      WHERE EXISTS
SQL>       (SELECT * FROM Account A
SQL>        where C.C# = A.C# and A.B# = B.B#)
SQL> and not exists
SQL> (select * from Account A1, Account A
SQL>  where C.C# = A.C# and A.B# = B.B#
SQL> and C3.C# = A1.C# and A1.B# = B.B#));
```

NAME

Adams
Blake
Jones

SQL>


```
SQL> -- question 9
SQL> select distinct C.Name
SQL> from Customer C, Account A1, Account A2
SQL> where C.C# = A1.C#
SQL> and C.C# = A2.C#
SQL> and A1.B# !=A2.B#;
```

NAME

Adams

Blake

Clark

Jones

SQL> _

```
SQL> -- question 10
SQL> select distinct C.Name
SQL> from Customer C, Account A1 where C.C# = A1.C#
SQL> group by C.Name Having count(A1.B#)>1;
```

NAME

Adams

Blake

Clark

Jones

SQL>

```
SQL> -- question 11
SQL> select *
SQL> from Customer FULL OUTER JOIN Account USING (C#)
SQL> FULL OUTER JOIN Bank USING(B#)
SQL> union
SQL> select C.Name
from SQL> Customer C, Account A1 where C.C# = A1.C#
SQL> group by C.Name Having count(A1.B#)=1;
select *
*
ERROR at line 1:
ORA-01789: query block has incorrect number of result columns
```

```
SQL> _
```

```
SQL> -- question 12
SQL> select Name, SUM(Balance)
SQL> from Customer FULL OUTER JOIN Account USING (C#)
SQL> group by C#, Name;
```

NAME	SUM(BALANCE)
Clark	7000
Adams	10000
Blake	9000
Jones	9000
Smith	

```
SQL>
```