

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

U 0

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below.

```
select snum, sname
from suppliers
where not exists
( select *
  from parts
   where not exists
     ( select *
       from shipments
      where shipments.snum = suppliers.snum
        and shipments.pnum = parts.pnum
     )
);
```

ExecuteClear Form

Database Results:

snum	sname
S6	Nicola Gianniberti

CNT 4714 Remote Database Mi X

localhost:8080/Project4/MySQLServlet

...

U 0

...

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below.

```
select *  
from suppliers;
```

ExecuteClear Form

Database Results:

snum	sname	status	city
S1	Michael Schumacher	1	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S13	Candice Swanepoel	3	Cape Town
S14	Adriana Lima	4	Sao Paulo
S15	Jennifer Lawrence	6	Owensboro
S16	Fernando Alonso	4	Madrid
S17	Rubens Barichello	3	Sao Paulo
S18	Tom Boonen	2	Brussels
S19	Johan Messeuw	1	Eekloo
S2	Juan Pablo Montoya	4	Interlagos
S20	Danilo Rossi	2	Milan
S21	Lizzie Armistead	1	Hempstead
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thurau	1	Berlin
S32	Bernd Schnieder	2	Berlin
S33	Rolf Aldag	3	Berlin
S4	Mark Webber	5	Melbourne
S44	Beryl Burton	4	London
S5	Jenson Button	4	London
S56	Marianne Vos	8	Zandvoort
S6	Nicola Gianniberti	2	Milan
S7	Christian Albers	3	Orlando
S8	Giancarlo Fisichella	3	Milan
S9	Kimi Rikonnen	2	Helsinki

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

...

U 0

...

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
insert into shipments
values ('SS', 'P6', 'J7', 400);
```

Execute

Clear Form

Database Results:

Statement executed successfully.

1 row(s) affected.

Business Logic Detected! - Updating Supplier Status

Business Logic updated 1 supplier status marks.

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

*** 0

← → ↺ ↻

if no query/update command is given the execute button will display an explicit information in the database.

All execution results will appear below.

```
select *
from suppliers;
```

Execute Clear Form

Database Results:

snum	sname	status	city
S1	Michael Schumacher	1	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S13	Candice Swanepoel	3	Cape Town
S14	Adriana Lima	4	Sao Paulo
S15	Jennifer Lawrence	6	Owensboro
S16	Fernando Alonso	4	Madrid
S17	Rubens Barichello	3	Sao Paulo
S18	Tom Boonen	2	Brussels
S19	Johan Messeuw	1	Eekloo
S2	Juan Pablo Montoya	4	Interlagos
S20	Danilo Rossi	2	Milan
S21	Lizzie Armistead	1	Hempstead
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thurau	1	Berlin
S32	Bernd Schnieder	2	Berlin
S33	Rolf Aldag	3	Berlin
S4	Mark Webber	5	Melbourne
S44	Beryl Burton	4	London
S5	Jenson Button	9	London
S56	Marianne Vos	8	Zandvoort
S6	Nicola Gianniberti	2	Milan
S7	Christian Albers	3	Orlando
S8	Giancarlo Fisichella	3	Milan
S9	Kimi Rikonnen	2	Helsinki

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

0

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
insert into suppliers
values ('S39','Candice Swanepoel',10,'Cardiff')
```

Execute

Clear Form

Database Results:

Statement executed successfully.
1 row(s) affected.

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

0

All execution results will appear below.

```
select *  
from suppliers;
```

ExecuteClear Form

Database Results:

snum	sname	status	city
S1	Michael Schumacher	1	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S13	Candice Swanepoel	3	Cape Town
S14	Adriana Lima	4	Sao Paulo
S15	Jennifer Lawrence	6	Owensboro
S16	Fernando Alonso	4	Madrid
S17	Rubens Barichello	3	Sao Paulo
S18	Tom Boonen	2	Brussels
S19	Johan Messeuw	1	Eekloo
S2	Juan Pablo Montoya	4	Interlagos
S20	Danilo Rossi	2	Milan
S21	Lizzie Armistead	1	Hempstead
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thurau	1	Berlin
S32	Bernd Schnieder	2	Berlin
S33	Rolf Aldag	3	Berlin
S39	Candice Swanepoel	10	Cardiff
S4	Mark Webber	5	Melbourne
S44	Beryl Burton	4	London
S5	Jenson Button	9	London
S56	Marianne Vos	8	Zandvoort
S6	Nicola Gianniberti	2	Milan
S7	Christian Albers	3	Orlando
S8	Giancarlo Fisichella	3	Milan
S9	Kimi Rikonnen	2	Helsinki

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

0

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
insert into shipments
values ('S39','F3','J1', 20);
```

Execute

Clear Form

Database Results:

Statement executed successfully.
1 row(s) affected.

Business Logic Detected! - Updating Supplier Status

Business Logic updated 0 supplier status marks.

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

All execution results will appear below.

```
select *
from suppliers;
```

Execute Clear Form

Database Results:

snum	sname	status	city
S1	Michael Schumacher	1	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S13	Candice Swanepoel	3	Cape Town
S14	Adriana Lima	4	Sao Paulo
S15	Jennifer Lawrence	6	Owensboro
S16	Fernando Alonso	4	Madrid
S17	Rubens Barichello	3	Sao Paulo
S18	Tom Boonen	2	Brussels
S19	Johan Messeuw	1	Eekloo
S2	Juan Pablo Montoya	4	Interlagos
S20	Danilo Rossi	2	Milan
S21	Lizzie Armistead	1	Hempstead
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thurau	1	Berlin
S32	Bernd Schnieder	2	Berlin
S33	Rolf Aldag	3	Berlin
S39	Candice Swanepoel	10	Cardiff
S4	Mark Webber	5	Melbourne
S44	Beryl Burton	4	London
S5	Jenson Button	9	London
S56	Marianne Vos	8	Zandvoort
S6	Nicola Gianniberti	2	Milan
S7	Christian Albers	3	Orlando
S8	Giancarlo Fisichella	3	Milan
S9	Kimi Rikonnen	2	Helsinki

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

...

U 0

≡

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
select distinct suppliers.snum, suppliers.sname, shipments.pnum
from suppliers natural join shipments
where shipments.pnum in
(select pnum
 from parts
 where not exists
 (select *
  from jobs
  where not exists
   (select *
    from shipments
    where shipments.snum = suppliers.snum
      and shipments.pnum = parts.pnum
      and shipments.jnum = jobs.jnum
   )
 )
);
```

Execute

Clear Form

Database Results:

snum	sname	pnum
S1	Michael Schumacher	P8

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

...

U 0

...

...

...

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below.

select *
from shipments;

ExecuteClear Form

Database Results:

snum	pnum	jnum	quantity
S1	P1	J1	40
S1	P1	J4	200
S1	P19	J13	200
S1	P22	J5	40
S1	P3	J13	95
S1	P8	J1	80
S1	P8	J13	200
S1	P8	J2	100
S1	P8	J22	340
S1	P8	J3	200
S1	P8	J4	100
S1	P8	J5	225
S1	P8	J6	230
S12	P3	J22	750
S17	P3	J2	800
S2	P3	J1	40
S2	P3	J2	15
S2	P3	J22	50
S2	P3	J3	20
S2	P3	J4	50
S2	P3	J5	91
S2	P4	J1	50

S2	P4	J1	50
S21	P2	J4	200
S22	P1	J3	120
S3	P10	J4	200
S3	P24	J2	200
S3	P3	J1	99
S3	P3	J6	75
S3	P4	J6	80
S3	P5	J6	120
S3	P9	J1	110
S39	P3	J1	20
S4	P6	J2	50
S44	P44	J2	100
S44	P48	J5	40
S5	P6	J7	400
S6	P1	J2	40
S6	P10	J3	100
S6	P11	J2	40
S6	P12	J4	75
S6	P13	J5	100
S6	P19	J5	50
S6	P2	J2	60
S6	P24	J2	20
S6	P3	J4	500
S6	P33	J4	40
S6	P4	J2	120
S6	P44	J4	20
S6	P48	J2	100
S6	P5	J22	200
S6	P53	J1	25
S6	P6	J22	120
S6	P7	J1	300
S6	P8	J3	110
S6	P9	J4	180
S7	P1	J2	40
S7	P12	J2	40
S7	P6	J2	40

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

0

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
update shipments
set quantity = quantity + 10
where pnum = 'P3';
```

ExecuteClear Form

Database Results:

Statement executed successfully.
13 row(s) affected.

Business Logic Detected! - Updating Supplier Status

Business Logic updated 3 supplier status marks.

CNT 4714 Remote Database M...

localhost:8080/Project4/MySQLServlet

7.0

All execution results will appear below.

select *
from shipments;

ExecuteClear Form

Database Results:

snum	pnum	jnum	quantity
S1	P1	J1	40
S1	P1	J4	200
S1	P19	J13	200
S1	P22	J5	40
S1	P3	J13	105
S1	P8	J1	80
S1	P8	J13	200
S1	P8	J2	100
S1	P8	J22	340
S1	P8	J3	200
S1	P8	J4	100
S1	P8	J5	225
S1	P8	J6	230
S12	P3	J22	760
S17	P3	J2	810
S2	P3	J1	50
S2	P3	J2	25
S2	P3	J22	60
S2	P3	J3	30
S2	P3	J4	60
S2	P3	J5	101
S2	P4	J1	50
S21	P2	J4	200
S22	P1	J3	120
S3	P10	J4	200
S3	P24	J2	200
S3	P3	J1	109
S3	P3	J6	85
S3	P4	J6	80
S2	P4	J1	50
S21	P2	J4	200
S22	P1	J3	120
S3	P10	J4	200
S3	P24	J2	200
S3	P3	J1	109
S3	P3	J6	85
S3	P4	J6	80
S3	P5	J6	120
S3	P9	J1	110
S39	P3	J1	30
S4	P6	J2	50
S44	P44	J2	100
S44	P48	J5	40
S5	P6	J7	400
S6	P1	J2	40
S6	P10	J3	100
S6	P11	J2	40
S6	P12	J4	75
S6	P13	J5	100
S6	P19	J5	50
S6	P2	J2	60
S6	P24	J2	20
S6	P3	J4	510
S6	P33	J4	40
S6	P4	J2	120
S6	P44	J4	20
S6	P48	J2	100
S6	P5	J22	200
S6	P53	J1	25
S6	P6	J22	120
S6	P7	J1	300
S6	P8	J3	110
S6	P9	J4	180
S7	P1	J2	40
S7	P12	J2	40
S7	P6	J2	40

CNT 4714 Remote Database Mi: X

localhost:8080/Project4/MySQLServlet

...

U 0

≡

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
select *
from suppliers;
```

ExecuteClear Form

Database Results:

snum	sname	status	city
S1	Michael Schumacher	6	Berlin
S10	David Coulthard	2	London
S11	Bernard Hinault	7	Paris
S12	Eddy Merckx	1	Brussels
S13	Candice Swanepoel	3	Cape Town
S14	Adriana Lima	4	Sao Paulo
S15	Jennifer Lawrence	6	Owensboro
S16	Fernando Alonso	4	Madrid
S17	Rubens Barichello	3	Sao Paulo
S18	Tom Boonen	2	Brussels
S19	Johan Messeuw	1	Eekloo
S2	Juan Pablo Montoya	9	Interlagos
S20	Danilo Rossi	2	Milan
S21	Lizzie Armistead	1	Hempstead
S22	Jan Ullrich	5	Bonn
S3	Dietrich Thurau	6	Berlin
S32	Bernd Schnieder	2	Berlin
S33	Rolf Aldag	3	Berlin
S4	Mark Webber	5	Melbourne
S44	Beryl Burton	4	London
S5	Jenson Button	4	London
S56	Marianne Vos	8	Zandvoort
S6	Nicola Gianniberti	2	Milan
S7	Christian Albers	3	Orlando
S8	Giancarlo Fisichella	3	Milan
S9	Kimi Rikonnen	2	Helsinki

CNT 4714 Remote Database M... X

localhost:8080/Project4/MySQLServlet

...

U 0

≡

Welcome to the Project 4 Remote Database Management System

You are connected to the Project4 database.

Please enter any valid SQL query or update statement.

If no query/update command is given the Execute button will display all supplier information in the database.

All execution results will appear below:

```
select sname
from suppliers
where snum in (select snum
               from shipments
               where pnum in (select pnum
                             from parts
                             where color = 'green'
                             )
               )
and
   snum not in (select snum
                from shipments
                where pnum in (select pnum
                              from parts
                              where color <> 'green'
                              )
                )
```

Execute

Clear Form

Database Results:

sname
Beryl Burton