

Exercise 3: Stored Procedures

```
CREATE TABLE products (  
    id INT PRIMARY KEY,  
    name VARCHAR(100),  
    price DECIMAL(10,2)  
);  
  
INSERT INTO products VALUES (1, 'Keyboard', 999.99);  
INSERT INTO products VALUES (2, 'Mouse', 499.50);  
INSERT INTO products VALUES (3, 'Monitor', 5499.00);  
DELIMITER //
```

```
CREATE PROCEDURE GetProductDetails(  
    IN pid INT,  
    OUT pname VARCHAR(100),  
    OUT pprice DECIMAL(10,2)  
)  
  
BEGIN  
  
    SELECT name, price INTO pname, pprice  
    FROM products  
    WHERE id = pid;  
  
END //
```

```
DELIMITER ;
```

```
SET @id = 2;  
SET @pname = '';  
SET @pprice = 0.0;
```

```
CALL GetProductDetails(@id, @pname, @pprice);
```

```
SELECT @pname AS ProductName, @pprice AS ProductPrice;
```

```
import java.sql.*;
```

```
public class CallStoredProcedure {
```

```
    public static void main(String[] args) {
```

```
        try {
```

```
            Class.forName("com.mysql.cj.jdbc.Driver");
```

```
            Connection conn = DriverManager.getConnection(
```

```
                "jdbc:mysql://localhost:3306/sdp_demo", "root", "klu@123");
```

```
            CallableStatement stmt = conn.prepareCall("{call GetProductDetails(?, ?, ?)}");
```

```
            stmt.setInt(1, 2);
```

```
            stmt.registerOutParameter(2, Types.VARCHAR);
```

```
            stmt.registerOutParameter(3, Types.DECIMAL);
```

```
stmt.execute();
```

```
String name = stmt.getString(2);
```

```
double price = stmt.getDouble(3);
```

```
System.out.println("Product Name: " + name);
```

```
System.out.println("Product Price: " + price);
```

```
conn.close();
```

```
} catch (Exception e) {
```

```
    e.printStackTrace();
```

```
}
```

```
}
```

```
}
```

OUTPUT:

The screenshot shows the MySQL Workbench interface. The left sidebar displays the 'SCHEMAS' tree with 'sdp_demo' expanded, showing various tables like 'address', 'cart', 'categories', etc. The main window shows a query: `select * from products;` The 'Result Grid' displays three rows of data:

#	id	name	price
1	1	Keyboard	999.99
2	2	Mouse	499.50
3	3	Monitor	5499.00

Below the result grid, the 'Action Output' pane shows the following actions:

#	Time	Action	Message	Duration / Fetch
1	23:31:00	select * from sdp_demo.users LIMIT 0, 1000	5 row(s) returned	0.047 sec / 0.000 sec
2	23:31:37	CREATE TABLE products (id INT PRIMARY KEY, name VARCHAR(100), price DECIMAL(10,2))	Error Code: 1050. Table 'products' already exists	0.000 sec
3	23:33:55	select * from products LIMIT 0, 1000	3 row(s) returned	0.000 sec / 0.000 sec

