

```

1 //222010307019 - Surya Kiran
2 package Sailors;
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.PreparedStatement;
6
7 public class Main {
8
9     public static void main(String[] args) throws Exception{
10         // TODO Auto-generated method stub
11         createTable();
12     }
13
14     public static void createTable() throws Exception{
15         try {
16             Connection con = getConnection();
17             PreparedStatement create = con.prepareStatement("CREATE TABLE sailorstable (sid
18 INTEGER, sname VARCHAR(255), rating INTEGER, age REAL, PRIMARY KEY(sid));");
19             create.executeUpdate();
20             }catch(Exception e){System.out.println(e);}
21             finally {
22                 System.out.println("Sailors Completed");
23             }
24
25
26         public static Connection getConnection() throws Exception{
27             try {
28                 String driver = "com.mysql.cj.jdbc.Driver";
29                 String url = "jdbc:mysql://localhost:3306/sailors";
30                 String username="root";
31                 String password= "surya";
32                 Class.forName(driver);
33
34                 Connection conn = DriverManager.getConnection(url, username, password) ;
35                 System.out.println("Connected");
36                 return conn;
37
38             }catch(Exception e) {System.out.println(e);}
39
40             return null;
41
42         }
43     }
44
45 }
```

The screenshot shows the Eclipse IDE's Console view. The title bar indicates the perspective is 'Java Application'. The console output is as follows:

```

Problems Javadoc Declaration Console X
<terminated> New_configuration [Java Application] C:\Users\MSV RAJU\p2\pool\plugins\org.eclipse.jst.jee.core\1.1.0.v20220104-1257\jre\bin\javaw.exe (Oct 28 2022, 9:23:23 PM - 9:23:25 PM) [pid: 14512]
Connected
Sailors Completed

```

eclipse-workspace - ExampleSailors/src/Sailors/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X package-info.java module-info.java

ExampleSailors

src

Sailors

Main.java

package-info.java

module-info.java

JRE System Library [JavaSE-17]

Referenced Libraries

mysql-connector-j-8.0.31.jar - C:\Users\MSV RAJU\Downloads

```
1 package Sailors;
2
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.PreparedStatement;
6
7 public class Main{
8
9     public static void main(String[] args) throws Exception{
10        //7000auto-generated method stub
11        createTable();
12    }
13
14    public static void createTable()throws Exception{
15        try{
16            Connection con = getConnection();
17            PreparedStatement create = con.prepareStatement("CREATE TABLE Boats(bid int, bname VARCHAR(30), color VARCHAR);");
18            create.executeUpdate();
19        }catch(Exception e){System.out.println(e);}
20        finally{
21            System.out.println("Boat Completed");
22        }
23    }
24
25    public static Connection getConnection()throws Exception{
26        try{
27            String driver = "com.mysql.cj.jdbc.Driver";
28            String url = "jdbc:mysql://localhost:3306/sailors";
29            String username="root";
30            String password="Surya";
31            Class.forName(driver);
32            Connection conn = DriverManager.getConnection(url, username, password);
33            System.out.println("Connected");
34            return conn;
35        }catch(Exception e){System.out.println(e);}
36        return null;
37    }
38 }
```

Problems Declaration Console X

<terminated> New\_configuration [Java Application] C:\Users\MSV RAJU\p2\pool\plugins\org.eclipse.jdt.openjdt.hotspot.jre.full.win32.x86\_64\_17.0.4.v20221004-1257\jre\bin\javaw.exe (Oct 28 2022, 9:24:59 PM - 9:25:01 PM) [pid: 11224]

Connected  
Boats Completed

The screenshot shows the Eclipse IDE interface with the following components:

- Package Explorer**: Shows the project structure with a package named "Sailors" containing files: Main.java, package-info.java, and module-info.java.
- Outline**: Shows the class hierarchy: Main > Sailors > main(String[] args) throws Exception, createTable(), and getConnection().
- Main.java** (Content View): The Java code for the Main class. It imports java.sql.Connection, java.sql.DriverManager, and java.sql.PreparedStatement. The main method creates a table named "Reserves". The createTable() method connects to a MySQL database using the JDBC driver, creates a connection, and executes an SQL statement to create the "Reserves" table. The getConnection() method also connects to the database using the same parameters. Both methods handle exceptions and print "Completed" to the console.
- Problems**: Shows a single warning: "terminated" New\_configuration [Java Application] C:\Users\MSV RAJU\p2\pool\plugins\org.eclipse.jst.j2ee.core\_1.1.0.v20221004-1257\jre\bin\javaw.exe (Oct 28 2022, 9:23:23 PM - 9:23:25 PM) [pid: 14512].
- Console**: Shows the output "Connected" and "Reserves Completed".

```
1 package Sailors;
2
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.PreparedStatement;
6
7 public class Main{
8
9     public static void main(String[] args) throws Exception{
10        //TODOAuto-generated method stub
11        createTable();
12    }
13
14    public static void createTable() throws Exception{
15        try{
16            Connection con = getConnection();
17            PreparedStatement create = con.prepareStatement("CREATE TABLE Reserves(sid int NOT NULL, bid int NOT NULL, day date);");
18            create.executeUpdate();
19        }catch(Exception e){System.out.println(e);}
20        finally{
21            System.out.println("Reserve Completed");
22        }
23    }
24
25    public static Connection getConnection() throws Exception{
26        try{
27            String driver = "com.mysql.cj.jdbc.Driver";
28            String url = "jdbc:mysql://localhost:3306/sailors";
29            String username="root";
30            String password="Surya";
31            Class.forName(driver);
32            Connection conn = DriverManager.getConnection(url, username, password);
33            System.out.println("Connected");
34            return conn;
35        }catch(Exception e) {System.out.println(e);}
36        return null;
37    }
38 }
```

eclipse-workspace - ExampleSailors/src/Sailors/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X

ExampleSailors

src

Sailors

Main.java

package-info.java

module-info.java

JRE System Library [JavaSE-17]

Referenced Libraries

mysql-connector-j-8.0.31.jar - C:\Users\MSV RAJU\Downloads

Main.java X package-info.java module-info.java

```
1 package Sailors;
2
3 import java.sql.Connection;
4 import java.sql.DriverManager;
5 import java.sql.PreparedStatement;
6
7 public class Main{
8
9@ public static void main(String[] args) throws Exception{
10 //1000Auto-generated method stub
11 createTable();
12 post();
13 }
14
15@ public static void post() throws Exception {
16     final int var1=22;
17     final String var2="Dustin";
18     final int var3=7;
19     final int var4=45;
20     try {
21         Connection con=getConnection();
22         PreparedStatement posted=con.prepareStatement("INSERT INTO Sailors(sid,sname,rating,age) VALUES('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
23         posted.executeUpdate();
24         catch(exception e) {System.out.println(e);}
25     finally {
26         System.out.println("1 Entered into Sailors");
27     }
28 }
29@ public static void createTable()throws Exception{@
30
31@ public static Connection getConnection()throws Exception{@
32
33
34 }
```

Outline X

Sailors

Main

main(String[]) : void

post() : void

createTable() : void

getConnection() : Connection

Problems @ Javadoc Declaration Console X

<terminated> New\_configuration [Java Application] C:\Users\MSV RAJU\p2\pool\plugins\org.eclipse.jdt.openjdk.hotspot.jre.full.win32.x86\_64\_17.0.4.v20221004-1257\jre\bin\javaw.exe (Oct28, 2022, 9:40:26 PM - 9:40:29 PM) [pid: 6972]

Connected

1 Entered into Sailors

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X \*Main.java X demo.java

Javamysqlonestest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10
11    public static void post() throws Exception{
12        final String var1 ="29";
13        final String var2 ="Brutus";
14        final String var3 ="1";
15        final String var4 ="33";
16        try {
17            Connection con = getConnection();
18            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19            posted.executeUpdate();
20        }
21        catch(Exception e) {
22            System.out.println(e);
23        }
24        finally {
25            System.out.println("Insertion Completed");
26        }
27    }
28    public static void createTable() throws Exception{ }
29    public static Connection getConnection() throws Exception { }
30 }
```

Outline X

database

Main

- \$ main(String[]) : void
- \$ post() : void
- \$ createTable() : void
- \$ getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct 2022, 12:22:41 pm – 12:22:42 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 21:29:601

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    Outline

\*Main.java x demo.java

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="31";
12        final String var2 ="Lubber";
13        final String var3 ="8";
14        final String var4 ="55";
15        try {
16            Connection con = getConnection();
17            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
18            posted.executeUpdate();
19        }
20        catch(Exception e) {
21            System.out.println(e);
22        }
23        finally {
24            System.out.println("Insertion Completed");
25        }
26    }
27    public static void createTable() throws Exception{
28}
29    public static Connection getConnection() throws Exception {
30}
31}
```

Problems Javadoc Declaration Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 28-Oct-2022 12:22:41 pm – 12:22:42 pm

Connected  
Reserves table created  
Connected  
Insertion Completed

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    \*Main.java    demo.java

Javamysqlonetest    Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    }
11    public static void post() throws Exception{
12        final String var1 ="32";
13        final String var2 ="Andy";
14        final String var3 ="8";
15        final String var4 ="25";
16        try {
17            Connection con = getConnection();
18            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19            posted.executeUpdate();
20        }
21        catch(Exception e) {
22            System.out.println(e);
23        }
24        finally {
25            System.out.println("Insertion Completed");
26        }
27    }
28    public static void createTable() throws Exception{
29    }
30    public static Connection getConnection() throws Exception {
31
32    }
33
34 }
```

Outline

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems    Javadoc    Declaration    Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:22:41 pm – 12:22:42 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable    Smart Insert    12:31 : 256

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    Main.java    demo.java

Javamysqlonetest    Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="58";
12        final String var2 ="Rusty";
13        final String var3 ="10";
14        final String var4 ="35";
15        try {
16            Connection con = getConnection();
17            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
18            posted.executeUpdate();
19        }
20        catch(Exception e) {
21            System.out.println(e);
22        }
23        finally {
24            System.out.println("Insertion Completed");
25        }
26    }
27}
28* public static void createTable() throws Exception{ }
29* public static Connection getConnection() throws Exception { }
30
31 }
```

Outline

- database
- Main
  - main(String[]) : void
  - post() : void
  - createTable() : void
  - getConnection() : Connection

Problems    Javadoc    Declaration    Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:22:41 pm – 12:22:42 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable    Smart Insert    16 : 14 : 354

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="64";
13     final String var2 ="Horatio";
14     final String var3 ="7";
15     final String var4 ="35";
16     try {
17         Connection con = getConnection();
18         PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19         posted.executeUpdate();
20     }
21     catch(Exception e) {
22         System.out.println(e);
23     }
24     finally {
25         System.out.println("Insertion Completed");
26     }
27 }
28 public static void createTable() throws Exception{
29
30 }
31 public static Connection getConnection() throws Exception {
32 }
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct 2022 12:25:57 pm - 12:25:58 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14:30:316

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    }
11    public static void post() throws Exception{
12        final String var1 ="71";
13        final String var2 ="Zorba";
14        final String var3 ="10";
15        final String var4 ="16";
16        try {
17            Connection con = getConnection();
18            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname, rating, age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19            posted.executeUpdate();
20        }
21        catch(Exception e) {
22            System.out.println(e);
23        }
24        finally {
25            System.out.println("Insertion Completed");
26        }
27    }
28    public static void createTable() throws Exception{
29    }
30    public static Connection getConnection() throws Exception {
31
32    }
33}
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:26:32 pm – 12:26:33 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 15 : 31 : 343

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;□
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    }
11    public static void post() throws Exception{
12        final String var1 ="74";
13        final String var2 ="Horatio";
14        final String var3 ="o";
15        final String var4 ="35";
16        try {
17            Connection con = getConnection();
18            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19            posted.executeUpdate();
20        }
21        catch(Exception e) {
22            System.out.println(e);
23        }
24        finally {
25            System.out.println("Insertion Completed");
26        }
27    }
28    public static void createTable() throws Exception{□
29    }
30    public static Connection getConnection() throws Exception {□
31    }
32 }
```

Outline X

database

Main

- \$ main(String[]): void
- \$ post(): void
- \$ createTable(): void
- \$ getConnection(): Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:27:11 pm – 12:27:11 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 15 : 31 : 344

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;□
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="85";
12        final String var2 ="Art";
13        final String var3 ="3";
14        final String var4 ="25";
15        try {
16            Connection con = getConnection();
17            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
18            posted.executeUpdate();
19        }
20        catch(Exception e) {
21            System.out.println(e);
22        }
23        finally {
24            System.out.println("Insertion Completed");
25        }
26    }
27}
28* public static void createTable() throws Exception{□
29* public static Connection getConnection() throws Exception {□
30*
31*
32*
33*
34*
35*
36*
37*
38*
39*
40*
41* }
```

Outline X

Main

- database
- Main
  - main(String[]) : void
  - post() : void
  - createTable() : void
  - getConnection() : Connection

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:27:46 pm – 12:27:46 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 32 : 314

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Ex... Main.java demo.java

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10
11    public static void post() throws Exception{
12        final String var1 ="95";
13        final String var2 ="Bob";
14        final String var3 ="3";
15        final String var4 ="63";
16        try {
17            Connection con = getConnection();
18            PreparedStatement posted = con.prepareStatement("INSERT INTO sailors (sid,sname,rating,age) VALUES ('"+var1+"','"+var2+"','"+var3+"','"+var4+"')");
19            posted.executeUpdate();
20        }
21        catch(Exception e) {
22            System.out.println(e);
23        }
24        finally {
25            System.out.println("Insertion Completed");
26        }
27    }
28    public static void createTable() throws Exception{
29    }
30    public static Connection getConnection() throws Exception {
31    }
32 }
```

Outline

- database
- Main
  - main(String[]): void
  - post(): void
  - createTable(): void
  - getConnection(): Connection

Problems Javadoc Declaration Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:27:46 pm – 12:27:46 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;[]
4
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         createTable();
9         post();
10    }
11    public static void post() throws Exception{
12        final String var1 ="101";
13        final String var2 ="Interlake";
14        final String var3 ="red";
15        try {
16            Connection con = getConnection();
17            PreparedStatement posted = con.prepareStatement("INSERT INTO boats (bid,bname,color) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18            posted.executeUpdate();
19        }
20        catch(Exception e) {
21            System.out.println(e);
22        }
23        finally {
24            System.out.println("Insertion Completed");
25        }
26    }
27    public static void createTable() throws Exception{[]
28    public static Connection getConnection() throws Exception {[]
57 }
58 }
```

Outline X

database

Main

- \$ main(String[]) : void
- \$ post() : void
- \$ createTable() : void
- \$ getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28Oct-2022, 12:29:54 pm – 12:29:57 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 32 : 321

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="102";
13     final String var2 ="Interlake";
14     final String var3 ="Blue";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO boats (bid,bname,color) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28
29 }
30 public static Connection getConnection() throws Exception {
31
32 }
33
34 }
```

Outline X

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems X Javadoc X Declaration X Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 28-Oct-2022, 12:31:37 pm – 12:31:38 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 33 : 322

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="103";
12        final String var2 ="Clipper";
13        final String var3 ="green";
14        try {
15            Connection con = getConnection();
16            PreparedStatement posted = con.prepareStatement("INSERT INTO boats (bid,bname,color) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
17            posted.executeUpdate();
18        }
19        catch(Exception e) {
20            System.out.println(e);
21        }
22        finally {
23            System.out.println("Insertion Completed");
24        }
25    }
26    public static void createTable() throws Exception{
27}
28    public static Connection getConnection() throws Exception {
29}
30}
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
```

Outline X database Main main(String[]) : void post() : void createTable() : void getConnection() : Connection

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022 12:32:01 pm – 12:32:02 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="104";
12        final String var2 ="Marine";
13        final String var3 ="red";
14        try {
15            Connection con = getConnection();
16            PreparedStatement posted = con.prepareStatement("INSERT INTO boats (bid,bname,color) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
17            posted.executeUpdate();
18        }
19        catch(Exception e) {
20            System.out.println(e);
21        }
22        finally {
23            System.out.println("Insertion Completed");
24        }
25    }
26    public static void createTable() throws Exception{
27}
28    public static Connection getConnection() throws Exception {
29}
30}
31}
32}
33}
34}
35}
36}
37}
38}
39}
40}
41}
42}
43}
44}
45}
46}
47}
48}
49}
50}
51}
52}
53}
54}
55}
56}
57}
58}
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct-2022, 12:32:01 pm – 12:32:02 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14:32:318

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    \*Main.java    demo.java

Javamysqlonetest    Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="22";
13     final String var2 ="102";
14     final String var3 ="1998-10-10";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28 }
29 public static Connection getConnection() throws Exception {
30 }
31
32 }
```

Outline

- database
- Main
  - main(String[]) : void
  - post() : void
  - createTable() : void
  - getConnection() : Connection

Problems    Javadoc    Declaration    Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28Oct-2022, 12:35:55 pm – 12:36:01 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable    Smart Insert    13 : 32 : 285

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="22";
13     final String var2 ="101";
14     final String var3 ="1998-10-10";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28 }
29 public static Connection getConnection() throws Exception {
30 }
31
32 }
```

Outline X

database

Main

- main(String[]): void
- post(): void
- createTable(): void
- getConnection(): Connection

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022 12:35:55 pm – 12:36:01 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 13 : 32 : 285

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;■
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="22";
13     final String var2 ="103";
14     final String var3 ="1998-08-10";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{■
28
29 public static Connection getConnection() throws Exception {■
30
31 }
```

Outline X

database

Main

- \$ main(String[]) : void
- \$ post() : void
- \$ createTable() : void
- \$ getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct-2022 12:38:19 pm – 12:38:22 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14:36 : 318

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="22";
13     final String var2 ="104";
14     final String var3 ="1998-07-10";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28 }
29 public static Connection getConnection() throws Exception {
30 }
31
32 }
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28Oct-2022, 12:38:58 pm – 12:39:01 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 15 : 14 : 332

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;□
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    }
11    public static void post() throws Exception{
12        final String var1 ="31";
13        final String var2 ="101";
14        final String var3 ="1998-10-11";
15        try {
16            Connection con = getConnection();
17            PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18            posted.executeUpdate();
19        }
20        catch(Exception e) {
21            System.out.println(e);
22        }
23        finally {
24            System.out.println("Insertion Completed");
25        }
26    }
27    public static void createTable() throws Exception{□
28    public static Connection getConnection() throws Exception {□
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58 }
```

Outline X

Main

- main(String[]): void
- post(): void
- createTable(): void
- getConnection(): Connection

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022 12:38:58 pm – 12:39:01 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 39 : 321

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="31";
13     final String var2 ="103";
14     final String var3 ="1998-6-11";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28
29 }
30 public static Connection getConnection() throws Exception {
31 }
32
33 }
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct-2022, 12:39:27 pm – 12:39:27 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 35 : 317

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="31";
13     final String var2 ="104";
14     final String var3 ="1998-12-11";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28
29 }
30 public static Connection getConnection() throws Exception {
31
32 }
33
34 }
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct 2022, 12:39:53 pm - 12:39:54 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14:36:318

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X \*Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="64";
13     final String var2 ="102";
14     final String var3 ="1998-05-09";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{
28 }
29 public static Connection getConnection() throws Exception {
30 }
31 }
32 }
33 }
```

Outline X

database

Main

- main(String[]): void
- post(): void
- createTable(): void
- getConnection(): Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28-Oct-2022, 12:40:31 pm – 12:40:32 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 41 : 323

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10    public static void post() throws Exception{
11        final String var1 ="64";
12        final String var2 ="101";
13        final String var3 ="1998-05-09";
14        try {
15            Connection con = getConnection();
16            PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
17            posted.executeUpdate();
18        }
19        catch(Exception e) {
20            System.out.println(e);
21        }
22        finally {
23            System.out.println("Insertion Completed");
24        }
25    }
26    public static void createTable() throws Exception{
27}
28    public static Connection getConnection() throws Exception {
29}
30}
```

Outline X

Main

- database
- Main
- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28 Oct 2022, 12:41:06 pm – 12:41:07 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writshla Smart Insert 15 x 14 x 220

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;[]
3
4 public class Main {
5
6     public static void main(String[] args) throws Exception{
7         createTable();
8         post();
9     }
10 }
11 public static void post() throws Exception{
12     final String var1 ="74";
13     final String var2 ="103";
14     final String var3 ="1998-08-09";
15     try {
16         Connection con = getConnection();
17         PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
18         posted.executeUpdate();
19     }
20     catch(Exception e) {
21         System.out.println(e);
22     }
23     finally {
24         System.out.println("Insertion Completed");
25     }
26 }
27 public static void createTable() throws Exception{[]
28 public static Connection getConnection() throws Exception {[]
29 }
30 }
```

Outline X

database

Main

- main(String[]) : void
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (28Oct-2022, 12:41:23 pm – 12:41:24 pm)

Connected  
Reserves table created  
Connected  
Insertion Completed

Writable Smart Insert 14 : 37 : 319

```
MySQL 8.0 Command Line Client - Unicode
```

```
mysql> use sailors
Database changed
mysql> select * from sailors
-> ;
+-----+-----+-----+-----+
| sid | sname | rating | age |
+-----+-----+-----+-----+
| 22  | Dustin |      7 |   45 |
| 29  | Brutus |      1 |   33 |
| 31  | Lubber |      8 |   55 |
| 32  | Andy   |      8 |   25 |
| 58  | Rusty  |     10 |   35 |
| 64  | Horatio |      7 |   35 |
| 71  | Zorba  |     10 |   16 |
| 74  | Horatio |      9 |   35 |
| 85  | Art    |      3 |   25 |
| 95  | Bob    |      3 |   63 |
+-----+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> select * from reserves;
+-----+-----+-----+
| sid | bid  | day  |
+-----+-----+-----+
| 22  | 102  | 1998-10-10 |
| 22  | 101  | 1998-10-10 |
| 22  | 103  | 1998-08-10 |
| 22  | 104  | 1998-07-10 |
| 31  | 101  | 1998-10-11 |
| 31  | 103  | 1998-06-11 |
| 31  | 104  | 1998-12-11 |
| 64  | 102  | 1998-05-09 |
| 64  | 101  | 1998-05-09 |
| 74  | 103  | 1998-08-09 |
+-----+-----+-----+
10 rows in set (0.00 sec)

mysql> select * from boats;
+-----+-----+-----+
| bid | bname | color |
+-----+-----+-----+
| 101 | Interlake | red  |
| 102 | Interlake | Blue |
| 103 | Clipper   | green |
| 104 | Marine    | red  |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         createTable();
9         //post();
10        get();
11    }
12    public static ArrayList<String> get() throws Exception{
13        try {
14            Connection con = getConnection();
15            PreparedStatement statement = con.prepareStatement("SELECT sname,age FROM Sailors");
16
17            ResultSet result = statement.executeQuery();
18
19            ArrayList<String> array = new ArrayList<String>();
20            while(result.next()) {
21                System.out.println(result.getString("sname"));
22
23                System.out.println(result.getString("age"));
24
25                array.add(result.getString("sname"));
26                array.add(result.getString("age"));
27
28            }
29            System.out.println("Records have been selected");
30            return array;
31
32        }catch(Exception e) {
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:16:07 pm – 3:16:08 pm)

Connected  
Reserves table created  
Connected  
Dustin  
45  
Brutus  
33  
Lubber

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Main.java

```
public class Main {
    public static void main(String[] args) throws Exception{
        get();
    }
    public static ArrayList<String> get() throws Exception{
        try {
            Connection con = getConnection();
            PreparedStatement statement = con.prepareStatement("SELECT sname,age FROM Sailors");
            ResultSet result = statement.executeQuery();

            ArrayList<String> array = new ArrayList<String>();
            while(result.next()) {
                System.out.print(result.getString("sname"));
                System.out.print(" ");
                System.out.println(result.getString("age"));

                array.add(result.getString("sname"));
                array.add(result.getString("age"));
            }
            System.out.println("Records have been selected");
        }
    }
}
```

Outline X

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:18:56 pm – 3:18:57 pm)

Connected  
Dustin 45  
Brutus 33  
Lubber 55  
Andy 25  
Rusty 35  
Horatio 35  
Zorba 16  
Horatio 35  
Art 25  
Bob 63  
Records have been selected

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT * FROM Sailors WHERE rating>7");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.print(result.getString("sid"));
20                System.out.print(" ");
21                System.out.print(result.getString("sname"));
22                System.out.print(" ");
23                System.out.print(result.getString("rating"));
24                System.out.print(" ");
25                System.out.print(result.getString("age"));
26                System.out.println(" ");
27
28                array.add(result.getString("sid"));
29                array.add(result.getString("sname"));
30                array.add(result.getString("rating"));
31                array.add(result.getString("age"));
32            }
33        }
34        return array;
35    }
36}
```

Outline X

database

Main

- main(String[]): void
- get(): ArrayList<String>
- post(): void
- createTable(): void
- getConnection(): Connection

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:33:52 pm – 3:33:52 pm)

Connected

31 Lubber 8 55  
32 Andy 8 25  
58 Rusty 10 35  
71 Zorba 10 16  
74 Horatio 9 35

Writable Smart Insert 34 : 13 : 1048



```
12     Connection con = getConnection();
13     PreparedStatement statement = con.prepareStatement("SELECT * FROM Sailors WHERE rating>7");
14
15     ResultSet result = statement.executeQuery();
16
17     ArrayList<String> array = new ArrayList<String>();
18     while(result.next()) {
19         System.out.print(result.getString("sid"));
20         System.out.print(" ");
21         System.out.print(result.getString("sname"));
22         System.out.print(" ");
23         System.out.print(result.getString("rating"));
24         System.out.print(" ");
25         System.out.print(result.getString("age"));
26         System.out.println(" ");
27
28         array.add(result.getString("sid"));
29         array.add(result.getString("sname"));
30         array.add(result.getString("rating"));
31         array.add(result.getString("age"));
32     }
33     return array;
34
35 }catch(Exception e) {
36     System.out.println(e);
37 }
38     return null;
39 }
40*
41 public static void post() throws Exception{}
42*
43 public static void createTable() throws Exception{}
44*
45 public static Connection getConnection() throws Exception {
```

Connected  
31 Lubber 8 55  
32 Andy 8 25  
58 Rusty 10 35  
71 Zorba 10 16  
74 Horatio 9 35

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help



```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT sname FROM Sailors,reserves WHERE sailors.sid = reserves.sid and reserves.bid=10");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22        return array;
23    }catch(Exception e) {
24        System.out.println(e);
25    }
26    return null;
27 }
28
29+ public static void post() throws Exception{ }
30+ public static void createTable() throws Exception{ }
31+ public static Connection getConnection() throws Exception { }
32 }
33
34 }
```

Problems Javadoc Declaration Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:39:11 pm – 3:39:13 pm)

Connected  
Dustin  
Lubber  
Horatio

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 import class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT sname FROM Sailors,reserves WHERE sailors.sid = reserves.sid and reserves.bid=103");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22        return array;
23    }catch(Exception e) {
24        System.out.println(e);
25    }
26    return null;
27 }
28 }
29 public static void post() throws Exception{}
30 public static void createTable() throws Exception{}
31 public static Connection getConnection() throws Exception {}
```

Outline

- database
- Main
  - main(String[]) : void
  - get() : ArrayList<String>
  - post() : void
  - createTable() : void
  - getConnection() : Connection

Problems   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:39:11 pm – 3:39:13 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable   Smart Insert   22 : 26 : 704

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT distinct sname FROM Sailors,reserves,boats WHERE sailors.sid = reserves.sid and");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{}
30    public static void createTable() throws Exception{}
31    public static Connection getConnection() throws Exception {}
32 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:44:30 pm – 3:44:34 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 13 : 81 : 369

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
3
4
5
6
7@ns Exception{
8
9
10@s Exception{
11
12
13 repareStatement("SELECT distinct sname FROM Sailors,reserves,boats WHERE sailors.sid = reserves.sid and reserves.bid=boats.bid and boats.color='red'");
14
15 eQuery();
16
17 List<String>();
18
19 ring("sname"));
20 me");
21
22
23
24
25
26
27
28
29
45@option{
58@rows Exception {
75
76
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:44:30 pm – 3:44:34 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 13 : 81 : 369

Outline X

database

Main

- \$ main(String[]) : void
- \$ get() : ArrayList<String>
- \$ post() : void
- \$ createTable() : void
- \$ getConnection() : Connection

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT distinct color FROM sailors,reserves,boats WHERE sailors.sname='Lubber'");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("color"));
20                array.add(result.getString("color"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{ }
30    public static void createTable() throws Exception{ }
31    public static Connection getConnection() throws Exception { }
32 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:47:29 pm – 3:47:30 pm)

Connected  
red  
green  
Blue

Writable Smart Insert 76 : 1 : 2212

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT sname FROM sailors,reserves,boats WHERE sailors.sid=reserves.sid");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{ }
30    public static void createTable() throws Exception{ }
31    public static Connection getConnection() throws Exception { }
32 }
```

Outline X

database

Main

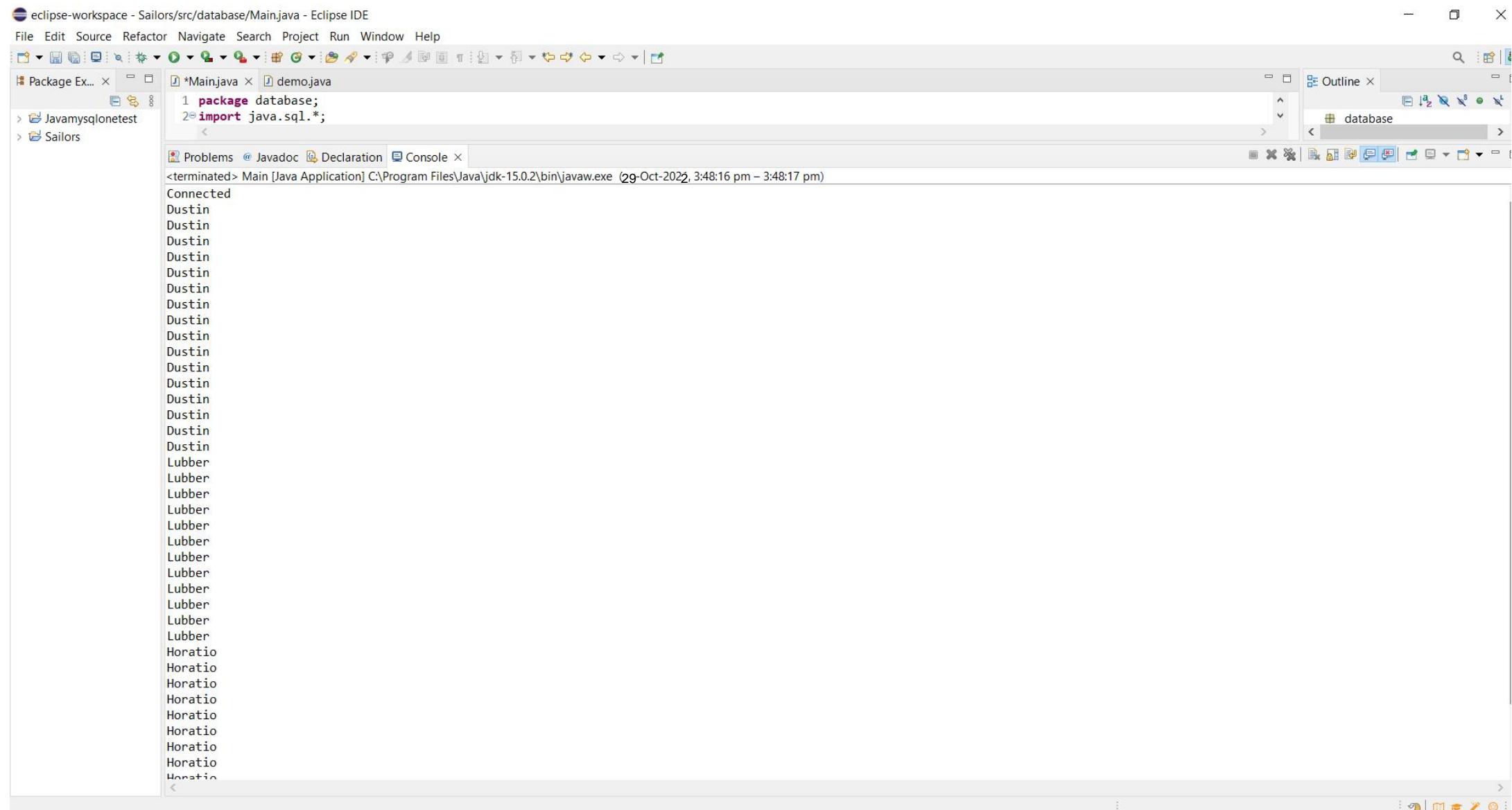
- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29 Oct 2022, 3:48:16 pm – 3:48:17 pm)

Horatio  
Horatio  
Horatio  
Horatio  
Horatio

Writable Smart Insert 23 : 13 : 692



eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT distinct sname FROM sailors,reserves,boats WHERE sailors.sid=reserves.sid");
14
15            ResultSet result = statement.executeQuery();
16        }
17        ArrayList<String> array = new ArrayList<String>();
18        while(result.next()) {
19            System.out.println(result.getString("sname"));
20            array.add(result.getString("sname"));
21        }
22        return array;
23
24    }catch(Exception e) {
25        System.out.println(e);
26    }
27    return null;
28 }
29 public static void post() throws Exception{}
30 public static void createTable() throws Exception{}
31 public static Connection getConnection() throws Exception {}
32 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29Oct-2022, 3:49:21 pm – 3:49:22 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 16 : 13 : 495

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Project Run Window Help

Package Explorer    \*Main.java    demo.java

Javamysqlonetest    Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT s.sname,s.rating+1 as rating FROM sailors s,reserves r1,reserves r2 WHERE s.sid=");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{}}
30    public static void createTable() throws Exception{}}
31    public static Connection getConnection() throws Exception {}}
32 }
```

Outline

database

Main

- \$ main(String[]) : void
- \$ get() : ArrayList<String>
- \$ post() : void
- \$ createTable() : void
- \$ getConnection() : Connection

Problems    Javadoc    Declaration    Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:54:18 pm – 3:54:20 pm)

Connected  
Dustin  
Dustin  
Dustin  
Dustin  
Dustin  
Lubber  
Lubber

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    \*Main.java    demo.java

Javamysqlonetest  
Sailors

```
1
2
3
4
5
6
7
8
9
10
11
12
13 ("SELECT s.sname,s.rating+1 as rating FROM sailors s,reserves r1,reserves r2 WHERE s.sid=r1.sid and s.sid=r2.sid and r1.day=r2.day and r1.bid=r2.bid");
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29+
30+
31+
32+
33+
34+
35+
36+
37+
38+
39+
40+
41+
42+
43+
44+
45+
46+
47+
48+
49+
50+
51+
52+
53+
54+
55+
56+
57+
58+
59+
60+
61+
62+
63+
64+
65+
66+
67+
68+
69+
70+
71+
72+
73+
74+
75+
76+
```

Outline

database  
Main

- main(String[])
- get()
- post()
- createTable()
- getConnection()

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29Oct-2022, 3:54:18 pm – 3:54:20 pm)

Connected  
Dustin  
Dustin  
Dustin  
Dustin  
Dustin  
Lubber  
Lubber

Writable   Smart Insert   75 : 2 : 2278

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   \*Main.java   demo.java

Javamysqlonetest   Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT s.sname,s.rating+1 as rating FROM sailors s,reserves r1,reserves r2 WHERE s.sid=r1.sid AND r1.sid=r2.sid");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22        } catch(Exception e) {
23            System.out.println(e);
24        }
25        return array;
26    }
27    return null;
}
```

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:54:18 pm – 3:54:20 pm)

Connected  
Dustin  
Dustin  
Dustin  
Dustin  
Lubber  
Lubber  
Lubber  
Horatio  
Horatio  
Horatio

Writable   Smart Insert   75 · 2 · 2278

Outline

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT distinct s.sname,s.rating+1 as rating FROM sailors s,reserves r1,reserves r2 WHERE s.sname = r1.sid AND r1.rid = r2.rid AND r2.rating > r1.rating");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{}
30    public static void createTable() throws Exception{}
31    public static Connection getConnection() throws Exception {}
32 }
33
34 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:55:02 pm – 3:55:03 pm)

Connected  
Dustin  
Lubber  
Horatio  
Horatio

Writable Smart Insert 13 : 81 : 369

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
3
4
5
6
7
8
9
10
11
12
13 distinct s.sname,s.rating+1 as rating FROM sailors s,reserves r1,reserves r2 WHERE s.sid=r1.sid and s.sid=r2.sid and r1.day=r2.day and r1.bid=r2.bid");
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29+
45+
58+
75
76
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29 Oct 2022, 3:55:02 pm – 3:55:03 pm)

Connected  
Dustin  
Lubber  
Horatio  
Horatio

Writable Smart Insert 13 : 81 : 369

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT s.age FROM sailors s WHERE s.sname like 'B%b'");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("age"));
20                array.add(result.getString("age"));
21            }
22            return array;
23
24        }catch(Exception e) {
25            System.out.println(e);
26        }
27        return null;
28    }
29    public static void post() throws Exception{ }
30    public static void createTable() throws Exception{ }
31    public static Connection getConnection() throws Exception { }
32 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:57:18 pm – 3:57:19 pm)

Connected  
63

Writable Smart Insert 76 : 1 : 2182

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b.bid and");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22        return array;
23    }catch(Exception e) {
24        System.out.println(e);
25    }
26    return null;
27 }
28
29    public static void post() throws Exception{ }
30    public static void createTable() throws Exception{ }
31    public static Connection getConnection() throws Exception { }
32 }
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:59:28 pm – 3:59:31 pm)

Dustin  
Lubber  
Horatio  
Dustin  
Lubber

Writable Smart Insert 22 : 26 : 737

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
3
4
5
6
7 args) throws Exception{
8
9
10 et() throws Exception{
11
12 ction();
13 nt = con.prepareStatement("SELECT s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b.bid and (b.color='red' or b.color='green')");
14
15 nt.executeQuery();
16
17 new ArrayList<String>();
18
19 ult.getString("sname"));
20 tring("sname"));
21
22
23
24
25
26
27
28
29 Exception{[]
45 throws Exception{[]
58 ction() throws Exception {[]
75
76
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:59:28 pm – 3:59:31 pm)

Dustin  
Lubber  
Horatio  
Dustin  
Lubber

Writable Smart Insert 22 : 26 : 737

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
3
4
5
6
7 args) throws Exception{
8
9
10 et() throws Exception{
11
12 ction();
13 nt = con.prepareStatement("SELECT s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b.bid and (b.color='red' or b.color='green')");
14
15 ent.executeQuery();
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022 3:59:28 pm – 3:59:31 pm)

Connected  
Dustin  
Lubber  
Horatio  
Dustin  
Lubber  
Horatio  
Dustin  
Lubber

Writable Smart Insert 22 : 26 : 737

Outline X

database

Main

- main(String[])
- get()
- post()
- createTable()
- getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 import java.sql.Connection;
4 import java.util.ArrayList;
5 public class Main {
6
7     public static void main(String[] args) throws Exception{
8         get();
9     }
10    public static ArrayList<String> get() throws Exception{
11        try {
12            Connection con = getConnection();
13            PreparedStatement statement = con.prepareStatement("SELECT distinct s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b");
14
15            ResultSet result = statement.executeQuery();
16
17            ArrayList<String> array = new ArrayList<String>();
18            while(result.next()) {
19                System.out.println(result.getString("sname"));
20                array.add(result.getString("sname"));
21            }
22        }
23        return array;
24    }
25    }catch(Exception e) {
26        System.out.println(e);
27    }
28    return null;
29}
30    public static void post() throws Exception{ }
31    public static void createTable() throws Exception{ }
32    public static Connection getConnection() throws Exception { }
33}
```

Outline X

database

Main

- main(String[]) : void
- get() : ArrayList<String>
- post() : void
- createTable() : void
- getConnection() : Connection

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:59:55 pm – 3:59:56 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 13 : 81 : 369

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demojava

Javamysqlonetest Sailors

```
1
2
3
4
5
6
7os Exception{
8
9
10ns Exception{
11
12
13 prepareStatement("SELECT distinct s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b.bid and (b.color='red' or b.color='green')");
14
15 teQuery();
16
17 yList<String>();
18
19 tring("sname"));
20 ame"));
21
22
23
24
25
26
27
28
29+{[]
45+ception{[]
58+throws Exception {[]
75
76
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:59:55 pm – 3:59:56 pm)

Connected  
Dustin  
Lubber  
Horatio

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (29-Oct-2022, 3:59:55 pm – 3:59:56 pm)

Outline X

database  
Main  
\$ main(String[]): void  
\$ get(): ArrayList<String>  
\$ post(): void  
\$ createTable(): void  
\$ getConnection(): Connection

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT distinct s.sname FROM sailors s,reserves r1,reserves r2,boats b1,boats b2 WHERE s.sid=r1.sid AND r1.bid=b1.bid AND r2.bid=b2.bid");
12            ResultSet result = statement.executeQuery();
13
14            ArrayList<String> array = new ArrayList<String>();
15            while(result.next()) {
16                System.out.println(result.getString("sname"));
17                array.add(result.getString("sname"));
18            }
19            return array;
20
21        }catch(Exception e) {
22            System.out.println(e);
23        }
24        return null;
25    }
26    public static void post() throws Exception{
27        final String var1 ="74";
28        final String var2 ="103";
29        final String var3 ="1998-08-09";
30        try {
31            Connection con = getConnection();
32            PreparedStatement posted = con.prepareStatement("INSERT INTO reserves(sid,bid,day) VALUES ('"+var1+"','"+var2+"','"+var3+"')");
33            posted.executeUpdate();
34        } catch (SQLException e) {
35            e.printStackTrace();
36        }
37    }
38}
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:16:08 am – 11:16:11 am)

Connected  
Dustin  
Lubber

Writable Smart Insert 15 · 1 · 556

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
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5
6
7
8
9
10
11
12
13 ors s,reserves r1,reserves r2,boats b1,boats b2 WHERE s.sid=r1.sid and r1.bid=b1.bid and s.sid=r2.sid and r2.bid=b2.bid and (b1.color='red'and b2.color='green'));
14
15
16
17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35 .LUES ('"+var1+"','"+var2+"','"+var3+"'));
```

Outline X

database

Main

- main(String[])
- get() : ArrayList
- post() : void
- createTable()
- getConnectio

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:16:08 am – 11:16:11 am)

Connected  
Dustin  
Lubber

Writable Smart Insert 15 : 1 : 556

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT distinct s.sname FROM sailors s,reserves r,boats b WHERE s.sid=r.sid and r.bid=b.bid and b.bid=1");
12             ResultSet result = statement.executeQuery();
13
14             ArrayList<String> array = new ArrayList<String>();
15             while(result.next()) {
16                 System.out.println(result.getString("sname"));
17                 array.add(result.getString("sname"));
18             }
19             return array;
20         }catch(Exception e) {
21             System.out.println(e);
22         }
23         return null;
24     }
25     public static void post() throws Exception{}}
26     public static void createTable() throws Exception{}}
27     public static Connection getConnection() throws Exception {}}
28 }
29
30
31
32
33
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35
36
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38
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40
41
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47
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49
50
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52
53
54
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56
57
58 }
```

Outline X

Main

- main(String)
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnection()

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:20:11 am – 11:20:11 am)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 13 : 300 : 588

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
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11
12
13    nd r.bid=b.bid and b.color='red' UNION SELECT distinct s2.sname FROM sailors s2,reserves r2,boats b2 WHERE s2.sid=r2.sid and r2.bid=b2.bid and b2.color='green' ");
14
15
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```

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:20:11 am – 11:20:11 am)

Connected  
Dustin  
Lubber  
Horatio

Word Wrap

Writable Smart Insert 12 · 300 · 588

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sid FROM sailors s WHERE s.rating=10 UNION SELECT r.sid FROM reserves r WHERE r.bid=104 ");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("sid"));
18                 array.add(result.getString("sid"));
19             }
20         }
21         return array;
22     }
23
24     }catch(Exception e) {
25         System.out.println(e);
26     }
27     return null;
28 }
29
30 public static void post() throws Exception{}
31 public static void createTable() throws Exception{}
32 public static Connection getConnection() throws Exception {
33 }
34 }
```

Outline X

database

Main

- main(String[])
- get() : ArrayList
- post() : void
- createTable()
- getConnection()

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:29:56 am – 11:29:59 am)

Connected  
58  
71  
22  
31

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid NOT IN (SELECT r.sid FROM reserves r WHERE r.bid IN (SELECT bid FROM books WHERE title = ?))");
12             statement.setString(1, "CSharp");
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("sname"));
18                 array.add(result.getString("sname"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{
26     }
27     public static void createTable() throws Exception{
28     }
29     public static Connection getConnection() throws Exception {
30         return null;
31     }
32     public static void main(String[] args) throws Exception{
33         get();
34     }
35     public static void post() throws Exception{
36     }
37     public static void createTable() throws Exception{
38     }
39     public static Connection getConnection() throws Exception {
40         return null;
41     }
42     public static void main(String[] args) throws Exception{
43         get();
44     }
45     public static void post() throws Exception{
46     }
47     public static void createTable() throws Exception{
48     }
49     public static Connection getConnection() throws Exception {
50         return null;
51     }
52     public static void main(String[] args) throws Exception{
53         get();
54     }
55     public static void post() throws Exception{
56     }
57     public static void createTable() throws Exception{
58     }
59     public static Connection getConnection() throws Exception {
60         return null;
61     }
62     public static void main(String[] args) throws Exception{
63         get();
64     }
65     public static void post() throws Exception{
66     }
67     public static void createTable() throws Exception{
68     }
69     public static Connection getConnection() throws Exception {
70         return null;
71     }
72     public static void main(String[] args) throws Exception{
73         get();
74     }
75 }
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:32:17 am – 11:32:18 am)

Connected  
Brutus  
Andy  
Rusty  
Zorba  
Horatio  
Art  
Bob

Writable Smart Insert 68 • 30 • 1022

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid NOT IN (SELECT r.sid FROM reserves r WHERE r.bid IN (SELECT bid FROM books WHERE title = ?))");
12             statement.setString(1, "CSharp");
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("sname"));
18                 array.add(result.getString("sname"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{
26     }
27     public static void createTable() throws Exception{
28     }
29     public static Connection getConnection() throws Exception {
30         return null;
31     }
32     public static void main(String[] args) throws Exception{
33         get();
34     }
35     public static void post() throws Exception{
36     }
37     public static void createTable() throws Exception{
38     }
39     public static Connection getConnection() throws Exception {
40         return null;
41     }
42     public static void main(String[] args) throws Exception{
43         get();
44     }
45     public static void post() throws Exception{
46     }
47     public static void createTable() throws Exception{
48     }
49     public static Connection getConnection() throws Exception {
50         return null;
51     }
52     public static void main(String[] args) throws Exception{
53         get();
54     }
55     public static void post() throws Exception{
56     }
57     public static void createTable() throws Exception{
58     }
59     public static Connection getConnection() throws Exception {
60         return null;
61     }
62     public static void main(String[] args) throws Exception{
63         get();
64     }
65     public static void post() throws Exception{
66     }
67     public static void createTable() throws Exception{
68     }
69     public static Connection getConnection() throws Exception {
70         return null;
71     }
72     public static void main(String[] args) throws Exception{
73         get();
74     }
75 }
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (36 Oct-2022, 11:32:17 am – 11:32:18 am)

Connected  
Brutus  
Andy  
Rusty  
Zorba  
Horatio  
Art  
Bob

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

JavaMysqlonetest Sailors

```
1
2* 
3
4
5
6
7* ows Exception{
8
9
10* ws Exception{
11
12
13 preparedStatement("SELECT s.sname FROM sailors s WHERE s.sid NOT IN (SELECT r.sid FROM reserves r WHERE r.bid IN (SELECT b.bid FROM boats b WHERE b.color='red'))");
14
15 teQuery();
16
17 yList<String>();
18
19 tring("sname"));
20 ame"));
21
22
23
24
25
26
27
28
29* {
30* eption{
31* rows Exception {
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:32:17 am – 11:32:18 am)

Connected  
Brutus  
Andy  
Rusty  
Zorba  
Horatio  
Art  
Bob

Writable Smart Insert 58 : 30 : 1823

Outline X

database  
Main  
main(String[])  
get() : ArrayList  
post() : void  
createTable()  
getConnection

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid IN (SELECT r.sid FROM reserves r WHERE r.bid IN (SELECT b.bid FROM boats b WHERE b.type = ?))");
12            statement.setString(1, "C");
13            ResultSet result = statement.executeQuery();
14
15            ArrayList<String> array = new ArrayList<String>();
16            while(result.next()) {
17                System.out.println(result.getString("sname"));
18                array.add(result.getString("sname"));
19            }
20        } catch(Exception e) {
21            System.out.println(e);
22        }
23        return array;
24    }
25    public static void post() throws Exception{
26    }
27    public static void createTable() throws Exception{
28    }
29    public static Connection getConnection() throws Exception {
30    }
31
32 }
```

Outline X

- database
- Main
  - \$ main(String[])
  - \$ get() : ArrayList<String>
  - \$ post() : void
  - \$ createTable() : void
  - \$ getConnection() : Connection

Problems X Javadoc X Declaration X Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:33:35 am – 11:33:36 am)

Connected  
Dustin  
Lubber  
Horatio

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Ex... X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2
5
6
7    throws Exception{
8
9
10   throws Exception{
11
12   ();
13   con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid IN (SELECT r.sid FROM reserves r WHERE r.bid IN (SELECT b.bid FROM boats b WHERE b.color='red'))");
14
15   executeQuery();
16
17   ArrayList<String>();
18
19   getString("sname"));
20   ("sname"));
21
22
23
24
25
26
27
28
29  tion{█
30  is Exception{█
31  () throws Exception {█
32
33
34
35
36
37
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39
40
41
42
43
44
45  is Exception{█
46  () throws Exception {█
47
48
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54
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56
57
58  () throws Exception {█
59
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65
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71
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```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 30-Oct-2022 11:33:35 am – 11:33:36 am

Connected  
Dustin  
Lubber  
Horatio

Outline X

database

Main

- \$ main(String[])
- \$ get() : ArrayList
- \$ post() : void
- \$ createTable()
- \$ getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid IN (SELECT r.sid FROM reserves r WHERE r.bid NOT IN (SELECT bid FROM books b WHERE b.title = 'The Great Gatsby' AND b.type = 'Fiction'))");
12             ResultSet result = statement.executeQuery();
13
14             ArrayList<String> array = new ArrayList<String>();
15             while(result.next()) {
16                 System.out.println(result.getString("sname"));
17                 array.add(result.getString("sname"));
18             }
19         } catch(Exception e) {
20             System.out.println(e);
21         }
22         return array;
23     }
24     public static void post() throws Exception{
25     }
26     public static void createTable() throws Exception{
27     }
28     public static Connection getConnection() throws Exception {
29     }
30     public static void main(String[] args) throws Exception{
31         get();
32     }
33     public static ArrayList<String> get() throws Exception{
34         try {
35             Connection con = getConnection();
36             PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid IN (SELECT r.sid FROM reserves r WHERE r.bid NOT IN (SELECT bid FROM books b WHERE b.title = 'The Great Gatsby' AND b.type = 'Fiction'))");
37             ResultSet result = statement.executeQuery();
38
39             ArrayList<String> array = new ArrayList<String>();
40             while(result.next()) {
41                 System.out.println(result.getString("sname"));
42                 array.add(result.getString("sname"));
43             }
44         } catch(Exception e) {
45             System.out.println(e);
46         }
47         return array;
48     }
49     public static void post() throws Exception{
50     }
51     public static void createTable() throws Exception{
52     }
53     public static Connection getConnection() throws Exception {
54     }
55 }
```

Outline X

Main

- main(String[])
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnection()

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 30-Oct-2022 11:34:30 am – 11:34:31 am

Connected  
Dustin  
Lubber  
Horatio  
Horatio

Writshle Smart Insert 12 · 156 · AAA

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2* ows Exception{
3
4
5
6
7* ws Exception{
8
9
10* ws Exception{
11
12
13.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid IN (SELECT r.sid FROM reserves r WHERE r.bid NOT IN (SELECT b.bid FROM boats b WHERE b.color='red'))");
14
15 teQuery();
16
17 yList<String>();
18
19 tring("sname"));
20 ame));
21
22
23
24
25
26
27
28
29* {}
30* ception{}
31* hrows Exception {}
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 30-Oct-2022 11:34:30 am – 11:34:31 am)

Connected  
Dustin  
Lubber  
Horatio  
Horatio

Writable Smart Insert 76 : 1 : 2276

Outline X

Main

- main(String[])
- get() : ArrayList
- post() : void
- createTable()
- getConnectic

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.sid NOT IN (SELECT r.sid FROM reserves r WHERE r.bid NOT IN (");
12            ResultSet result = statement.executeQuery();
13
14            ArrayList<String> array = new ArrayList<String>();
15            while(result.next()) {
16                System.out.println(result.getString("sname"));
17                array.add(result.getString("sname"));
18            }
19            return array;
20        }catch(Exception e) {
21            System.out.println(e);
22        }
23        return null;
24    }
25    public static void post() throws Exception{}
26    public static void createTable() throws Exception{}
27    public static Connection getConnection() throws Exception {}
28 }
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58 }
```

Outline X

Main

- main(String[] args)
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnection()

Problems X Javadoc X Declaration X Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe ( 30-Oct-2022 11:35:18 am – 11:35:19 am)

Connected  
Brutus  
Andy  
Rusty  
Zorba  
Art  
Bob

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2*
3
4
5
6
7* Exception{
8
9
10* xception{
11
12
13 areStatement("SELECT s.sname FROM sailors s WHERE s.sid NOT IN (SELECT r.sid FROM reserves r WHERE r.bid NOT IN (SELECT b.bid FROM boats b WHERE b.color='red'))");
14
15 ery();
16
17 t<String>();
18
19 g("sname"));
20 });
21
22
23
24
25
26
27
28
29*
30 ion[]
31 *s Exception {
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58* s Exception {
59
60
61
62
63
64
65
66
67
68
69
70
71
72
73
74
75
76
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:35:18 am – 11:35:19 am)

Connected  
Brutus  
Andy  
Rusty  
Zorba  
Art  
Bob

Writable Smart Insert 76 : 1 : 2280

Outline X database Main main(String[]) get() : ArrayList post() : void createTable() : void getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sid FROM sailors s WHERE s.rating > ALL (SELECT s2.rating FROM sailors s2)");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("sname"));
18                 array.add(result.getString("sname"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{ }
26     public static void createTable() throws Exception{ }
27     public static Connection getConnection() throws Exception { }
28 }
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58 }
```

Outline X Main

- database
- Main
  - main(String[])
  - get(): ArrayList<String>
  - post(): void
  - createTable(): void
  - getConnection(): Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 , 11:37:44 am – 11:37:47 am)  
Connected

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

```
1 package;
2 import java.sql.*;
3 
4 public class Main {
5     static void main(String[] args) throws Exception{
6         ArrayList<String> get() throws Exception{
7             Connection con = getConnection();
8             PreparedStatement statement = con.prepareStatement("SELECT s.sid FROM sailors s WHERE s.rating > ANY (SELECT s2.rating FROM sailors s2 WHERE s2.sname='Horatio')");
9             ResultSet result = statement.executeQuery();
10            ArrayList<String> array = new ArrayList<String>();
11            while(result.next()) {
12                System.out.println(result.getString("sid"));
13                array.add(result.getString("sid"));
14            }
15            return array;
16        }
17        catch(Exception e) {
18            System.out.println(e);
19        }
20        return null;
21    }
22    static void post() throws Exception{
23    }
24    static void createTable() throws Exception{
25    }
26    static Connection getConnection() throws Exception {
27        return null;
28    }
29}
```

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:39:32 am – 11:39:34 am)

Connected

31  
32  
58  
71  
74

Writable   Smart Insert   23 : 13 : 725

Outline

database

Main

- main(String[])
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer    Main.java    demo.java

Javamysqlonetest    Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT s.sid FROM sailors s WHERE s.rating > ALL (SELECT s2.rating FROM sailors s2)");
12
13            ResultSet result = statement.executeQuery();
14
15            ArrayList<String> array = new ArrayList<String>();
16            while(result.next()) {
17                System.out.println(result.getString("sid"));
18                array.add(result.getString("sid"));
19            }
20        } catch(Exception e) {
21            System.out.println(e);
22        }
23        return array;
24    }
25    public static void post() throws Exception{
26    }
27    public static void createTable() throws Exception{
28    }
29    public static Connection getConnection() throws Exception {
30    }
31
32 }
```

Outline

Main

- main(String[])
- get(): ArrayList<String>
- post(): void
- createTable(): void
- getConnection(): Connection

Problems    Javadoc    Declaration    Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:40:10 am – 11:40:12 am)  
Connected

Writable    Smart Insert    13 : 147 : 435

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT avg(s.age) from sailors s");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("avg(s.age)"));
18                 array.add(result.getString("avg(s.age)"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{
26     }
27     public static void createTable() throws Exception{
28     }
29     public static Connection getConnection() throws Exception {
30     }
31 }
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58 }
```

Outline X

- database
- Main
  - main(String[])
  - get() : ArrayList
  - post() : void
  - createTable()
  - getConnection()

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:42:42 am – 11:42:45 am)

Connected  
36.7000

Writable Smart Insert 11:14:258

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT avg(s.age) FROM sailors s WHERE s.rating=10");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("avg(s.age)"));
18                 array.add(result.getString("avg(s.age)"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{}}
26     public static void createTable() throws Exception{}}
27     public static Connection getConnection() throws Exception {}}
28 }
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58 }
```

Outline X

database

Main

- \$ main(String)
- \$ get() : Array
- \$ post() : void
- \$ createTable()
- \$ getConnection()

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:43:28 am – 11:43:29 am)

Connected  
25.5000

Writable Smart Insert 13 : 115 : 403

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sname,s.age FROM sailors s WHERE s.age = (SELECT max(s2.age) FROM sailors s2)");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.print(result.getString("sname"));
18                 System.out.print(" ");
19                 System.out.println(result.getString("age"));
20                 array.add(result.getString("sname"));
21                 array.add(result.getString("age"));
22             }
23         }
24         return array;
25     }
26     }catch(Exception e) {
27         System.out.println(e);
28     }
29     return null;
30 }
31
32 public static void post() throws Exception{
33     public static void createTable() throws Exception{

```

Problems Declaration Console

terminated: Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022, 11:46:56 am – 11:46:57 am)

Connected  
Bob 63

Writable Smart Insert 32 : 48 : 947

Outline X database Main main(String[]) get():ArrayList post():void createTable():void getConnection():Connection

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8
9     public static ArrayList<String> get() throws Exception{
10        try {
11            Connection con = getConnection();
12            PreparedStatement statement = con.prepareStatement("SELECT COUNT(*) FROM sailors");
13
14            ResultSet result = statement.executeQuery();
15
16            ArrayList<String> array = new ArrayList<String>();
17            while(result.next()) {
18                System.out.println(result.getString("COUNT(*)"));
19                array.add(result.getString("COUNT(*)"));
20            }
21        }
22        return array;
23
24    }catch(Exception e) {
25        System.out.println(e);
26    }
27    return null;
28 }
29+
30+ public static void post() throws Exception{
31+
32+ public static void createTable() throws Exception{
33+
34+ public static Connection getConnection() throws Exception {
35}
36}
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe ( 30-Oct-2022 11:48:10 am – 11:48:11 am)

Connected  
10

Writable Smart Insert 75 : 2 : 2166

Outline X

database

Main

- \$ main(String[])
- \$ get() : ArrayList<String>
- \$ post() : void
- \$ createTable()
- \$ getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT COUNT(distinct s.sname) FROM sailors s");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("COUNT(distinct s.sname)"));
18                 array.add(result.getString("COUNT(distinct s.sname)"));
19             }
20         } catch(Exception e) {
21             System.out.println(e);
22         }
23         return array;
24     }
25     public static void post() throws Exception{
26     }
27     public static void createTable() throws Exception{
28     }
29     public static Connection getConnection() throws Exception {
30     }
31     public static void main(String[] args) throws Exception{
32         get();
33     }
34     public static ArrayList<String> get() throws Exception{
35         try {
36             Connection con = getConnection();
37             PreparedStatement statement = con.prepareStatement("SELECT COUNT(distinct s.sname) FROM sailors s");
38             ResultSet result = statement.executeQuery();
39             ArrayList<String> array = new ArrayList<String>();
40             while(result.next()) {
41                 System.out.println(result.getString("COUNT(distinct s.sname)"));
42                 array.add(result.getString("COUNT(distinct s.sname)"));
43             }
44         } catch(Exception e) {
45             System.out.println(e);
46         }
47         return array;
48     }
49     public static void post() throws Exception{
50     }
51     public static void createTable() throws Exception{
52     }
53     public static Connection getConnection() throws Exception {
54     }
55 }
```

Outline X

Main

- \$ main(String[] args)
- \$ get(): ArrayList<String>
- \$ post(): void
- \$ createTable(): void
- \$ getConnection(): Connection

Problems @ Javadoc Declaration Console X

(30-Oct-2022)

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:49:52 am – 11:49:53 am)

Connected

9

Writable Smart Insert 75 : 2 : 2213

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.age > (SELECT MAX(s2.age) FROM sailors s2 WHERE s2.rating = 10");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("s.sname"));
18                 array.add(result.getString("s.sname"));
19             }
20         }
21         return array;
22     }
23     }catch(Exception e) {
24         System.out.println(e);
25     }
26     return null;
27 }
28 }
29 public static void post() throws Exception{}
30 public static void createTable() throws Exception{}
31 public static Connection getConnection() throws Exception {
32 }
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(30-Oct-2022 11:54:01 am – 11:54:03 am)

Connected  
Dustin  
Lubber  
Bob

Writable Smart Insert 13 : 162 : 450

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1  ge database;
2  t java.sql.*;
3  c lass Main {
4
5    public static void main(String[] args) throws Exception{
6      get();
7
8    public static ArrayList<String> get() throws Exception{
9      try {
10        Connection con = getConnection();
11        PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.age > (SELECT MAX(s2.age) FROM sailors s2 WHERE s2.rating = 10)");
12
13        ResultSet result = statement.executeQuery();
14
15        ArrayList<String> array = new ArrayList<String>();
16        while(result.next()) {
17          System.out.println(result.getString("s.sname"));
18          array.add(result.getString("s.sname"));
19        }
20      return array;
21    }
22
23    }catch(Exception e) {
24      System.out.println(e);
25    }
26  }
27  return null;
28
29  public static void post() throws Exception{ }
30  public static void createTable() throws Exception{ }
31  public static Connection getConnection() throws Exception { }
```

Outline X

Main

- main(String[])
- get(): ArrayList<String>
- post(): void
- createTable(): void
- getConnection(): Connection

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(30-Oct-2022 11:54:01 am – 11:54:03 am)

Connected  
Dustin  
Lubber  
Bob

Writable Smart Insert 13 : 162 : 450

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

```
1  ge database;
2  t java.sql.*;□
3  c class Main {
4
5    public static void main(String[] args) throws Exception{
6      get();
7
8    public static ArrayList<String> get() throws Exception{
9      try {
10        Connection con = getConnection();
11        PreparedStatement statement = con.prepareStatement("SELECT s.sname FROM sailors s WHERE s.age > (SELECT MIN(s2.age) FROM sailors s2 WHERE s2.rating = 10)");
12
13        ResultSet result = statement.executeQuery();
14
15        ArrayList<String> array = new ArrayList<String>();
16
17        while(result.next()) {
18          System.out.println(result.getString("s.sname"));
19          array.add(result.getString("s.sname"));
20        }
21      }
22      return array;
23
24    }catch(Exception e) {
25      System.out.println(e);
26    }
27    return null;
28
29  public static void post() throws Exception{□
30  public static void createTable() throws Exception{□
31  public static Connection getConnection() throws Exception {□
```

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(30-Oct-2022 11:54:42 am – 11:54:42 am)

Connected  
Dustin  
Brutus  
Lubber  
Andy  
Rusty  
Horatio  
Horatio  
Art  
Bob

Writable   Smart Insert   58 : 64 : 1820

Outline

- Main
  - main(String[])
  - get() : ArrayList<String>
  - post() : void
  - createTable()
  - getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT s.rating,MIN(s.age) FROM sailors s GROUP BY s.rating");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.print(result.getString("rating"));
18                 System.out.print(" ");
19                 System.out.println(result.getString("MIN(s.age)"));
20                 array.add(result.getString("rating"));
21                 array.add(result.getString("MIN(s.age)"));
22             }
23         }
24         return array;
25     }
26     }catch(Exception e) {
27         System.out.println(e);
28     }
29     return null;
30 }
31 }
32 public static void post() throws Exception{
33 }
34 public static void createTable() throws Exception{
35 }
36 public static Connection getConnection() throws Exception {
37 }
```

Outline X database Main

- main(String[])
- get(): ArrayList
- post(): void
- createTable(): void
- getConnection(): Connection

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (30-Oct-2022 11:58:00 am – 11:58:02 am)

Connected  
7 35  
1 33  
8 25  
10 16  
9 35  
3 25

Writable Smart Insert 78 : 2 : 2324

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

```
1 e database;
2 java.sql.*;
3 class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7
8         public static ArrayList<String> get() throws Exception{
9             try {
10                 Connection con = getConnection();
11                 PreparedStatement statement = con.prepareStatement("SELECT s.rating,MIN(s.age) as minage FROM sailors s WHERE s.age>18 GROUP BY s.rating HAVING count(*)>1");
12
13                 ResultSet result = statement.executeQuery();
14
15                 ArrayList<String> array = new ArrayList<String>();
16                 while(result.next()) {
17                     System.out.print(result.getString("rating"));
18                     System.out.print(" ");
19                     System.out.println(result.getString("minage"));
20                     array.add(result.getString("rating"));
21                     array.add(result.getString("minage"));
22
23                 }
24             }
25             return array;
26
27         }catch(Exception e) {
28             System.out.println(e);
29         }
30         return null;
31
32     public static void post() throws Exception{
33     public static void createTable() throws Exception{
34     public static Connection getConnection() throws Exception {
35
36
37
38
39
30-Oct-2022 11:59:39 am - 11:59:40 am
Connected
7 35
8 25
3 25
```

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(30-Oct-2022 11:59:39 am - 11:59:40 am)

Writable   Smart Insert   23 · 51 · 815

Outline

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2+ import java.sql.*;□
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8+     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT b.bid, COUNT(*) AS reservationcount FROM reserves r,boats b WHERE r.bid=b.bid and b.color='red'");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.print(result.getString("bid"));
18                 System.out.print(" ");
19                 System.out.println(result.getString("reservationcount"));
20                 array.add(result.getString("bid"));
21                 array.add(result.getString("reservationcount"));
22             }
23         }
24         return array;
25     }
26     }catch(Exception e) {
27         System.out.println(e);
28     }
29     return null;
30 }
31 }
32+ public static void post() throws Exception{□
33+ public static void createTable() throws Exception{□
34+ public static Connection getConnection() throws Exception {□
```

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(30-Oct-2022 12:05:46 pm – 12:05:49 pm)

Connected  
101 3  
104 2

Writable Smart Insert 61 : 64 : 1971

Outline X database Main

- \$ main(String[])
- \$ get() : ArrayList<String>
- \$ post() : void
- \$ createTable()
- \$ getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1
2*
3
4
5
6
7* d main(String[] args) throws Exception{
8
9
10* ayList<String> get() throws Exception{
11
12 n con = getConnection();
13 tatement statement = con.prepareStatement("SELECT b.bid, COUNT(*) AS reservationcount FROM reserves r,boats b WHERE r.bid=b.bid and b.color='red' GROUP BY b.bid");
14
15 result = statement.executeQuery();
16
17 <String> array = new ArrayList<String>();
18 ult.next() {
19 m.out.print(result.getString("bid"));
20 m.out.print(" ");
21 m.out.println(result.getString("reservationcount"));
22 .add(result.getString("bid"));
23 .add(result.getString("reservationcount"));
24
25 ray;
26
27 ion e) {
28 t.println(e);
29
30
31
32* d post() throws Exception{
33* d createTable() throws Exception{
34* ection getConnection() throws Exception {
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe |31-Oct-2022,12:05:46 pm – 12:05:49 pm|

Connected  
101 3  
104 2

Writable Smart Insert 61 : 64 : 1971

Outline X database Main

- \$ main(String[])
- \$ get() : ArrayList<String>
- \$ post() : void
- \$ createTable()
- \$ getConnection()

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT * FROM sailors s,reserves r");
12
13            ResultSet result = statement.executeQuery();
14
15            ArrayList<String> array = new ArrayList<String>();
16
17            while(result.next()) {
18                System.out.print(result.getString("sid"));
19                System.out.print(" ");
20                System.out.print(result.getString("sname"));
21                System.out.print(" ");
22                System.out.print(result.getString("rating"));
23                System.out.print(" ");
24                System.out.print(result.getString("age"));
25                System.out.print(" ");
26                System.out.print(result.getString("bid"));
27                System.out.print(" ");
28                System.out.println(result.getString("day"));
29                array.add(result.getString("sid"));
30                array.add(result.getString("sname"));
31                array.add(result.getString("rating"));
32                array.add(result.getString("age"));
33                array.add(result.getString("bid"));
34            }
35        } catch (Exception e) {
36            e.printStackTrace();
37        }
38    }
39}
```

Outline X

Main

- main(String[] args)
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnnection()

Problems Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022, 12:09:55 pm – 12:09:56 pm)

Connected

95 Bob 3 63 102 1998-10-10  
85 Art 3 25 102 1998-10-10  
74 Horatio 9 35 102 1998-10-10  
71 Zorba 10 16 102 1998-10-10  
64 Horatio 7 35 102 1998-10-10  
58 Rusty 10 35 102 1998-10-10

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
14     PreparedStatement statement = connection.prepareStatement("SELECT * FROM Sailors WHERE RELEVANT = ?");  
15     ResultSet result = statement.executeQuery();  
16  
17     ArrayList<String> array = new ArrayList<String>();  
18     while(result.next()) {  
19         System.out.print(result.getString("sid"));  
20         System.out.print(" ");  
21         System.out.print(result.getString("sname"));  
22         System.out.print(" ");  
23         System.out.print(result.getString("rating"));  
24         System.out.print(" ");  
25         System.out.print(result.getString("age"));  
26         System.out.print(" ");  
27         System.out.print(result.getString("bid"));  
28         System.out.print(" ");  
29         System.out.println(result.getString("day"));  
30         array.add(result.getString("sid"));  
31         array.add(result.getString("sname"));  
32         array.add(result.getString("rating"));  
33         array.add(result.getString("age"));  
34         array.add(result.getString("bid"));  
35         array.add(result.getString("day"));  
36     }  
37     return array;  
38  
39 } catch(Exception e) {  
40     System.out.println(e);  
41 }  
42 return null;  
43 }  
44 }
```

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(31-Oct-2022, 12:09:55 pm - 12:09:56 pm)

Connected

95 Bob 3 63 102 1998-10-10  
85 Art 3 25 102 1998-10-10  
74 Horatio 9 35 102 1998-10-10  
71 Zorba 10 16 102 1998-10-10  
64 Horatio 7 35 102 1998-10-10  
58 Rusty 10 35 102 1998-10-10

Writable Smart Insert 18:35:531

Outline X database Main main(String[]) get() : ArrayList<String> post() : void createTable() getConnectio

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

Main.java

```
14    Statement statement = conn.prepareStatement("SELECT * FROM Sailors WHERE rate > ?");  
15    ResultSet result = statement.executeQuery();
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022 12:09:55 pm - 12:09:56 pm)

Connected

95 Bob 3 63 102 1998-10-10  
85 Art 3 25 102 1998-10-10  
74 Horatio 9 35 102 1998-10-10  
71 Zorba 10 16 102 1998-10-10  
64 Horatio 7 35 102 1998-10-10  
58 Rusty 10 35 102 1998-10-10  
32 Andy 8 25 102 1998-10-10  
31 Lubber 8 55 102 1998-10-10  
29 Brutus 1 33 102 1998-10-10  
22 Dustin 7 45 102 1998-10-10  
95 Bob 3 63 101 1998-10-10  
85 Art 3 25 101 1998-10-10  
74 Horatio 9 35 101 1998-10-10  
71 Zorba 10 16 101 1998-10-10  
64 Horatio 7 35 101 1998-10-10  
58 Rusty 10 35 101 1998-10-10  
32 Andy 8 25 101 1998-10-10  
31 Lubber 8 55 101 1998-10-10  
29 Brutus 1 33 101 1998-10-10  
22 Dustin 7 45 101 1998-10-10  
95 Bob 3 63 103 1998-08-10  
85 Art 3 25 103 1998-08-10  
74 Horatio 9 35 103 1998-08-10  
71 Zorba 10 16 103 1998-08-10  
64 Horatio 7 35 103 1998-08-10  
58 Rusty 10 35 103 1998-08-10  
32 Andy 8 25 103 1998-08-10  
31 Lubber 8 55 103 1998-08-10  
29 Brutus 1 33 103 1998-08-10  
22 Dustin 7 45 103 1998-08-10  
95 Bob 3 63 104 1998-07-10  
85 Art 3 25 104 1998-07-10  
74 Horatio 9 35 104 1998-07-10  
71 Zorba 10 16 104 1998-07-10  
64 Horatio 7 35 104 1998-07-10  
58 Rusty 10 35 104 1998-07-10  
32 Andy 8 25 104 1998-07-10

Outline X database

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022, 12:09:55 pm – 12:09:56 pm)

```
32 Andy 8 25 104 1998-07-10
31 Lubber 8 55 104 1998-07-10
29 Brutus 1 33 104 1998-07-10
22 Dustin 7 45 104 1998-07-10
95 Bob 3 63 101 1998-10-11
85 Art 3 25 101 1998-10-11
74 Horatio 9 35 101 1998-10-11
71 Zorba 10 16 101 1998-10-11
64 Horatio 7 35 101 1998-10-11
58 Rusty 10 35 101 1998-10-11
32 Andy 8 25 101 1998-10-11
31 Lubber 8 55 101 1998-10-11
29 Brutus 1 33 101 1998-10-11
22 Dustin 7 45 101 1998-10-11
95 Bob 3 63 103 1998-06-11
85 Art 3 25 103 1998-06-11
74 Horatio 9 35 103 1998-06-11
71 Zorba 10 16 103 1998-06-11
64 Horatio 7 35 103 1998-06-11
58 Rusty 10 35 103 1998-06-11
32 Andy 8 25 103 1998-06-11
31 Lubber 8 55 103 1998-06-11
29 Brutus 1 33 103 1998-06-11
22 Dustin 7 45 103 1998-06-11
95 Bob 3 63 104 1998-12-11
85 Art 3 25 104 1998-12-11
74 Horatio 9 35 104 1998-12-11
71 Zorba 10 16 104 1998-12-11
64 Horatio 7 35 104 1998-12-11
58 Rusty 10 35 104 1998-12-11
32 Andy 8 25 104 1998-12-11
31 Lubber 8 55 104 1998-12-11
29 Brutus 1 33 104 1998-12-11
22 Dustin 7 45 104 1998-12-11
95 Bob 3 63 102 1998-05-09
85 Art 3 25 102 1998-05-09
74 Horatio 9 35 102 1998-05-09
71 Zorba 10 16 102 1998-05-09
```

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

Problems   Javadoc   Declaration   Console

```
<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022,12:09:55 pm - 12:09:56 pm)
71 Zorba 10 16 104 1998-12-11
64 Horatio 7 35 104 1998-12-11
58 Rusty 10 35 104 1998-12-11
32 Andy 8 25 104 1998-12-11
31 Lubber 8 55 104 1998-12-11
29 Brutus 1 33 104 1998-12-11
22 Dustin 7 45 104 1998-12-11
95 Bob 3 63 102 1998-05-09
85 Art 3 25 102 1998-05-09
74 Horatio 9 35 102 1998-05-09
71 Zorba 10 16 102 1998-05-09
64 Horatio 7 35 102 1998-05-09
58 Rusty 10 35 102 1998-05-09
32 Andy 8 25 102 1998-05-09
31 Lubber 8 55 102 1998-05-09
29 Brutus 1 33 102 1998-05-09
22 Dustin 7 45 102 1998-05-09
95 Bob 3 63 101 1998-05-09
85 Art 3 25 101 1998-05-09
74 Horatio 9 35 101 1998-05-09
71 Zorba 10 16 101 1998-05-09
64 Horatio 7 35 101 1998-05-09
58 Rusty 10 35 101 1998-05-09
32 Andy 8 25 101 1998-05-09
31 Lubber 8 55 101 1998-05-09
29 Brutus 1 33 101 1998-05-09
22 Dustin 7 45 101 1998-05-09
95 Bob 3 63 103 1998-08-09
85 Art 3 25 103 1998-08-09
74 Horatio 9 35 103 1998-08-09
71 Zorba 10 16 103 1998-08-09
64 Horatio 7 35 103 1998-08-09
58 Rusty 10 35 103 1998-08-09
32 Andy 8 25 103 1998-08-09
31 Lubber 8 55 103 1998-08-09
29 Brutus 1 33 103 1998-08-09
22 Dustin 7 45 103 1998-08-09
```

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT * FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=103");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.print(result.getString("sid"));
18                 System.out.print(" ");
19                 System.out.print(result.getString("sname"));
20                 System.out.print(" ");
21                 System.out.print(result.getString("rating"));
22                 System.out.print(" ");
23                 System.out.print(result.getString("age"));
24                 System.out.print(" ");
25                 System.out.print(result.getString("bid"));
26                 System.out.print(" ");
27                 System.out.print(result.getString("day"));
28                 System.out.println(result.getString("day"));
29                 array.add(result.getString("sid"));
30                 array.add(result.getString("sname"));
31                 array.add(result.getString("rating"));
32                 array.add(result.getString("age"));
33                 array.add(result.getString("bid"));
34                 array.add(result.getString("day"));
35             }
36         }
37     }
38 }
```

Outline X

Main

- main(String)
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnect()

Problems @ Javadoc Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022, 12:11:18 pm – 12:11:18 pm)

Connected

22 Dustin 7 45 103 1998-08-10  
31 Lubber 8 55 103 1998-06-11  
74 Horatio 9 35 103 1998-08-09

Writable Smart Insert 34:52:1208

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
12 connection con = getconnection();
13     PreparedStatement statement = con.prepareStatement("SELECT * FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=103");
14 
15     ResultSet result = statement.executeQuery();
16 
17     ArrayList<String> array = new ArrayList<String>();
18     while(result.next()) {
19         System.out.print(result.getString("sid"));
20         System.out.print(" ");
21         System.out.print(result.getString("sname"));
22         System.out.print(" ");
23         System.out.print(result.getString("rating"));
24         System.out.print(" ");
25         System.out.print(result.getString("age"));
26         System.out.print(" ");
27         System.out.print(result.getString("bid"));
28         System.out.print(" ");
29         System.out.println(result.getString("day"));
30         array.add(result.getString("sid"));
31         array.add(result.getString("sname"));
32         array.add(result.getString("rating"));
33         array.add(result.getString("age"));
34         array.add(result.getString("bid"));
35         array.add(result.getString("day"));
36     }
37     return array;
38 
39 }catch(Exception e) {
40     System.out.println(e);
41 }
42 return null;
43 }
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022, 12:11:18 pm – 12:11:18 pm)

Connected

22 Dustin 7 45 103 1998-08-10  
31 Lubber 8 55 103 1998-06-11  
74 Horatio 9 35 103 1998-08-09

Outline X database Main main(String[] args) {  
 get();  
 post();  
 createTable();  
 getConnecti

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT * FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=102");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.print(result.getString("sid"));
18                 System.out.print(" ");
19                 System.out.print(result.getString("sname"));
20                 System.out.print(" ");
21                 System.out.print(result.getString("rating"));
22                 System.out.print(" ");
23                 System.out.print(result.getString("age"));
24                 System.out.print(" ");
25                 System.out.print(result.getString("bid"));
26                 System.out.print(" ");
27                 System.out.println(result.getString("day"));
28                 array.add(result.getString("sid"));
29                 array.add(result.getString("sname"));
30                 array.add(result.getString("rating"));
31                 array.add(result.getString("age"));
32                 array.add(result.getString("bid"));
33                 array.add(result.getString("day"));
34             }
35             array.add(result.getString("day"));
36         }
37     }
38 }
```

Outline

Main

- main(String[  
get(): ArrayList  
post(): void  
createTable()  
getConnection()

Problems   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe | 31-Oct-2022, 12:12:27 pm – 12:12:28 pm

Connected

22 Dustin 7 45 102 1998-10-10

64 Horatio 7 35 102 1998-05-09

Writable   Smart Insert   35 : 52 : 1249

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
12 connection con = getconnection();
13     PreparedStatement statement = con.prepareStatement("SELECT * FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=102");
14 
15     ResultSet result = statement.executeQuery();
16 
17     ArrayList<String> array = new ArrayList<String>();
18     while(result.next()) {
19         System.out.print(result.getString("sid"));
20         System.out.print(" ");
21         System.out.print(result.getString("sname"));
22         System.out.print(" ");
23         System.out.print(result.getString("rating"));
24         System.out.print(" ");
25         System.out.print(result.getString("age"));
26         System.out.print(" ");
27         System.out.print(result.getString("bid"));
28         System.out.print(" ");
29         System.out.println(result.getString("day"));
30         array.add(result.getString("sid"));
31         array.add(result.getString("sname"));
32         array.add(result.getString("rating"));
33         array.add(result.getString("age"));
34         array.add(result.getString("bid"));
35         array.add(result.getString("day"));
36     }
37     return array;
38 
39 }catch(Exception e) {
40     System.out.println(e);
41 }
42 return null;
43 }
```

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022 12:12:27 pm – 12:12:28 pm)

Connected  
22 Dustin 7 45 102 1998-10-10  
64 Horatio 7 35 102 1998-05-09

Writable Smart Insert 35 : 52 : 1249

Outline X database Main

- main(String[] args)
- get(): ArrayList<String>
- post(): void
- createTable(): void
- getConnectivity(): boolean

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT sname FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=102");
12
13            ResultSet result = statement.executeQuery();
14
15            ArrayList<String> array = new ArrayList<String>();
16            while(result.next()) {
17                System.out.println(result.getString("sname"));
18
19                array.add(result.getString("sname"));
20            }
21        } catch(Exception e) {
22            System.out.println(e);
23        }
24        return null;
25    }
26}
27
28
29 }
```

Outline X

Main

- main(String[])
- get() : ArrayList<String>
- post() : void
- createTable()
- getConnection()

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(31-Oct-2022,12:13:41 pm – 12:13:42 pm)

Connected  
Dustin  
Horatio

Writable Smart Insert 20 : 5 : 622

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer X Main.java X demo.java

Javamysqloonetest Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10            Connection con = getConnection();
11            PreparedStatement statement = con.prepareStatement("SELECT sname FROM sailors s,reserves r WHERE s.sid=r.sid and r.bid=103");
12
13            ResultSet result = statement.executeQuery();
14
15            ArrayList<String> array = new ArrayList<String>();
16            while(result.next()) {
17                System.out.println(result.getString("sname"));
18
19                array.add(result.getString("sname"));
20            }
21            return array;
22        }
23        catch(Exception e) {
24            System.out.println(e);
25        }
26        return null;
27    }
28}
29
30
31 }
```

Outline X

Main

- main(String[])
- get(): ArrayList<String>
- post(): void
- createTable()
- getConnectic

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe(31-Oct-2022, 12:13:57 pm - 12:14:00 pm)

Connected  
Dustin  
Lubber  
Horatio

Writable Smart Insert 13 : 135 : 423

eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer   Main.java   demo.java

Javamysqlonetest   Sailors

```
1 package database;
2 import java.sql.*;
3 public class Main {
4
5     public static void main(String[] args) throws Exception{
6         get();
7     }
8     public static ArrayList<String> get() throws Exception{
9         try {
10             Connection con = getConnection();
11             PreparedStatement statement = con.prepareStatement("SELECT distinct s.sname FROM sailors s,reserves r,boats b WHERE s.sid = r.sid and r.bid=b.bid and b");
12
13             ResultSet result = statement.executeQuery();
14
15             ArrayList<String> array = new ArrayList<String>();
16             while(result.next()) {
17                 System.out.println(result.getString("sname"));
18
19                 array.add(result.getString("sname"));
20             }
21             return array;
22         } catch(Exception e) {
23             System.out.println(e);
24         }
25         return null;
26     }
27 }
28 }
```

Outline

Main

- main(String[])
- get(): ArrayList<String>
- post(): void
- createTable(): void
- getConnetcion(): Connection

Problems   Javadoc   Declaration   Console

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe 31-Oct-2022, 12:17:25 pm – 12:17:26 pm

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eclipse-workspace - Sailors/src/database/Main.java - Eclipse IDE

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Package Explorer X Main.java X demo.java

Javamysqlonetest Sailors

```
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12
13 and r.bid=b.bid and b.color='red' IN (SELECT distinct s2.sname FROM sailors s2,reserves r2, boats b2 WHERE s2.sid=r2.sid and r2.bid=b2.bid and b2.color='blue'));
```

Outline X database Main

- main(String[])
- get()
- post()
- createTable()
- getConnection()

Problems Declaration Console X

<terminated> Main [Java Application] C:\Program Files\Java\jdk-15.0.2\bin\javaw.exe (31-Oct-2022, 12:17:25 pm – 12:17:26 pm)

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