



الأكاديمية العربية للعلوم والتكنولوجيا والنقل البحري

Arab Academy for Science, Technology & Maritime Transport

**COLLEGE OF ENGINEERING AND TECHNOLOGY**  
*DEPARTMENT OF COMPUTER ENGINEERING*

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**Lab 2**  
*Stream Sockets (Single Client)*

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## Stream Sockets

Listing 1: Server.java

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Server{
5     public static void main(String[] args){
6         int port = 8000;
7         try{
8             ServerSocket server = new ServerSocket(port);
9             Socket client = server.accept();
10        }catch(IOException ex){
11            System.out.println(ex);
12        }
13    }
14 }
```

Listing 2: Client.java

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Client{
5     public static void main(String[] args){
6         String host = "localhost";
7         int port = 8000;
8         try{
9             Socket socket = new Socket(host, port);
10        }catch(IOException ex){
11            System.out.println(ex);
12        }
13    }
14 }
```

# Data Streams

Listing 3: Server.java

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Server{
5     public static void main(String[] args){
6         int port = 8000;
7         try{
8             ServerSocket server = new ServerSocket(port);
9             Socket client = server.accept();
10            DataInputStream in = new DataInputStream(client.getInputStream());
11            DataOutputStream out = new DataOutputStream(client.getOutputStream());
12            out.writeUTF("Message from the server");
13            System.out.println(in.readUTF());
14        }catch(IOException ex){
15            System.out.println(ex);
16        }
17    }
18 }
```

Listing 4: Client.java

```
1 import java.net.*;
2 import java.io.*;
3
4 public class Client{
5     public static void main(String[] args){
6         String host = "localhost";
7         int port = 8000;
8         try{
9             Socket socket = new Socket(host, port);
10            DataInputStream in = new DataInputStream(socket.getInputStream());
11            DataOutputStream out = new DataOutputStream(socket.getOutputStream());
12            System.out.println(in.readUTF());
13            out.writeUTF("Message from the client");
14        }catch(IOException ex){
15            System.out.println(ex);
16        }
17    }
18 }
```