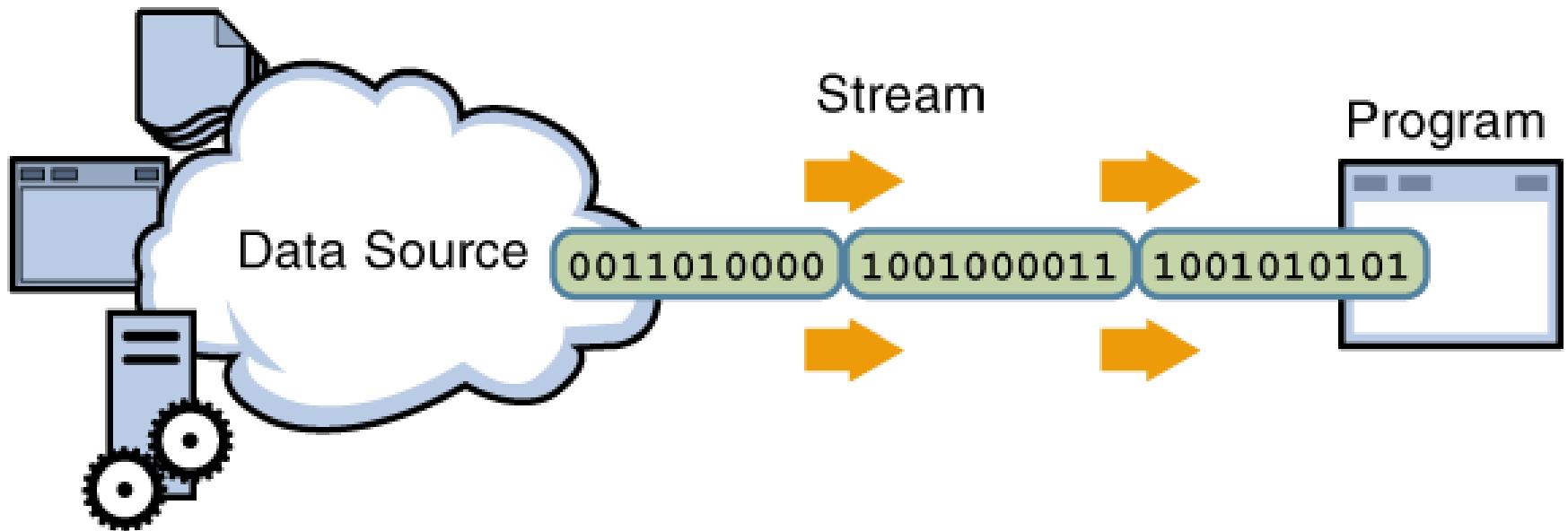# Streams (File Handling)

# Streams (File Handling)

# Streams (File Handling)

- **Byte Streams**

- **Character Streams**

# Streams (File Handling)

- byte    0 to  255


- char    0  to 65,535

# Streams (File Handling)

**byte -127 to +128**

**0 to 255**

**char -32,768 to 32,768**

**0 to 65,535**

| 97 | a | **01100001** |
|----|---|--------------|
| 98 | b | **01100010** |
| 99 | c | **01100011** |

| 97 | a | **0000 0000 0110 0001** |
|----|---|-------------------------|
| 98 | b | **0000 0000 0110 0010** |
| 99 | c | **0000 0000 0110 0011** |

# Byte Streams

- **java.io.*;**

  InputStream

  OutputStream

# InputStream

**InputStream**

**FileInputStream**

**FilterInputStream**

**BufferedInputStream**
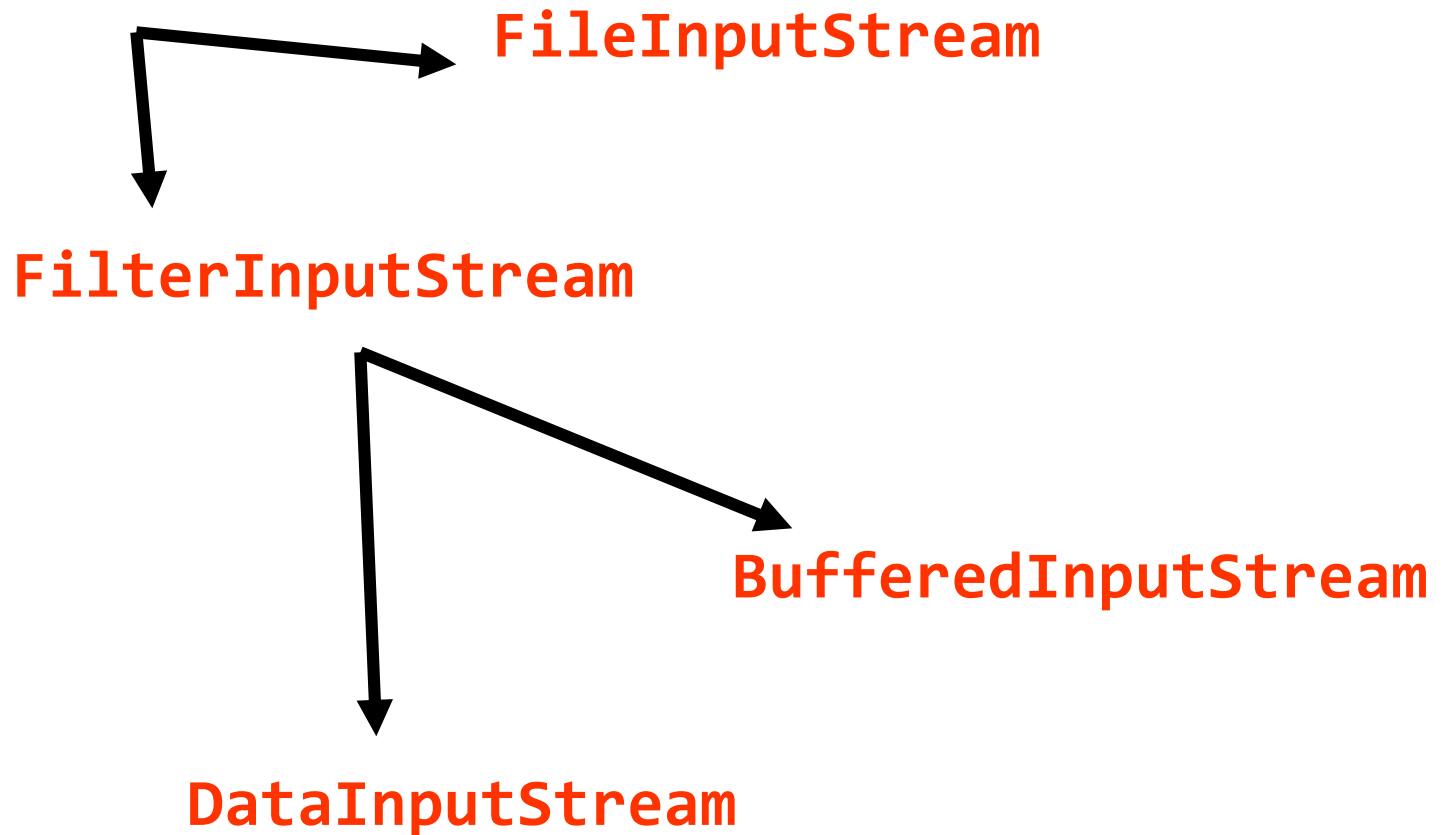
**DataInputStream**

# BufferedInputStream

- ✓ **BufferedInputStream(InputStream)**

- ✓ **BufferedInputStream(InputStream,int)**

# FileInputStream

```java
FileInputStream fis=new FileInputStream("Test.txt");

int c;

while((c=fis.read())!=-1)
{
    System.out.print("  "+(char)c);
}
```
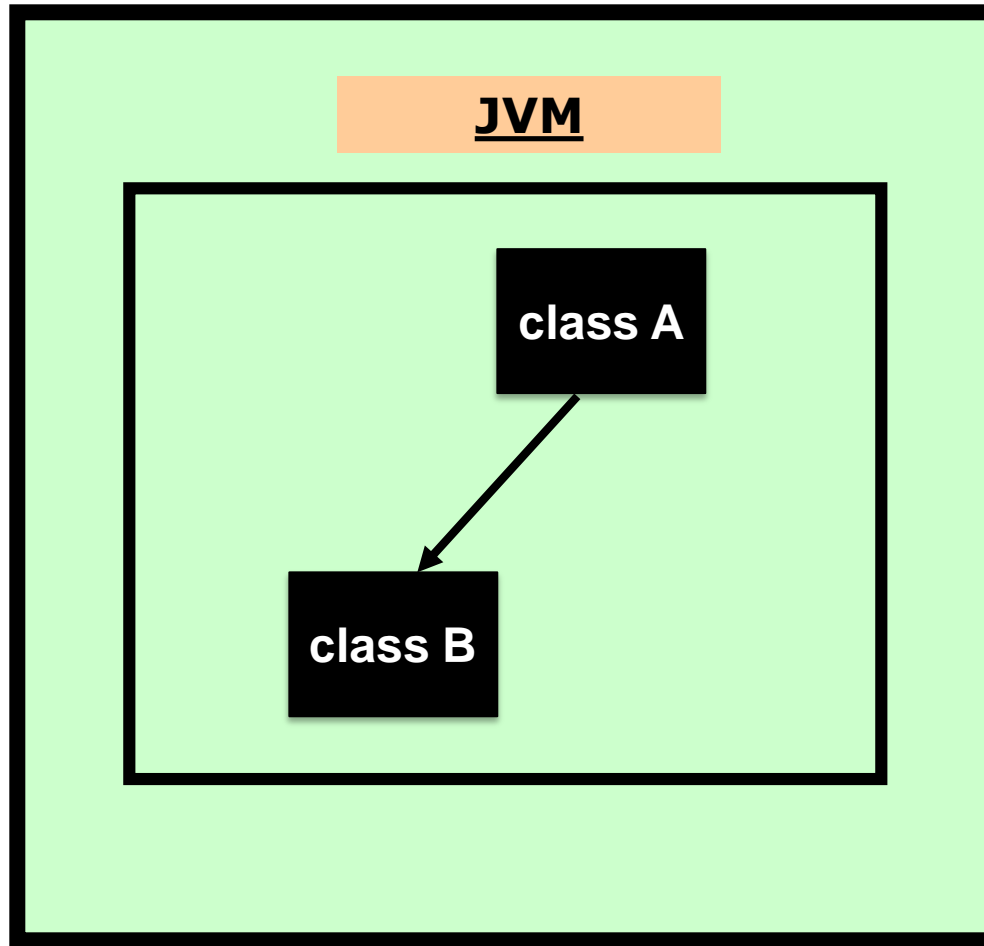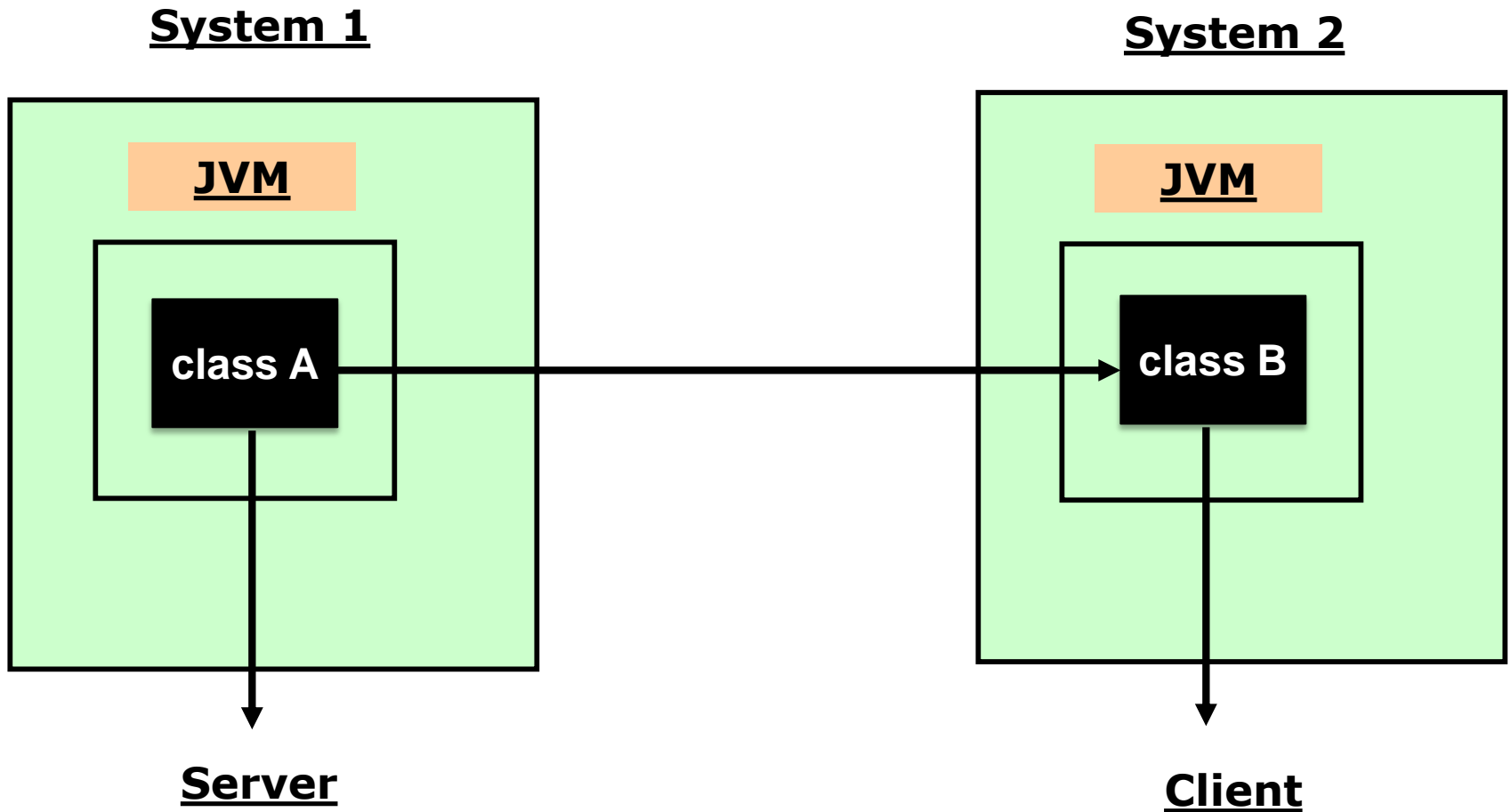
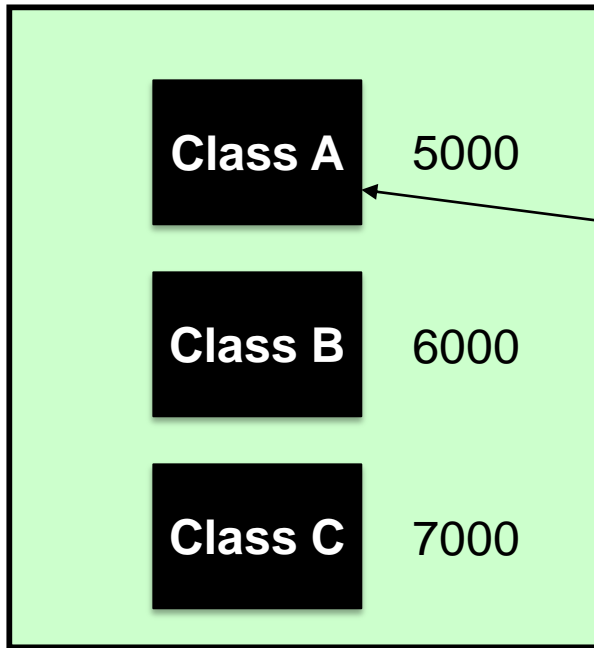# Desktop Application

**System 1**

# Distributed Application

**System 1**

**System 2**

**JVM**

**JVM**

class A

class B

**Server**

**Client**

# Distributed Application

- ✓ **Networking**

- ✓ **RMI**

- ✓ **EJB**

# Distributed Application

**System 1**

**System 2**

**Class A** 5000

**Class B** 6000

**Class C** 7000

**JVM**

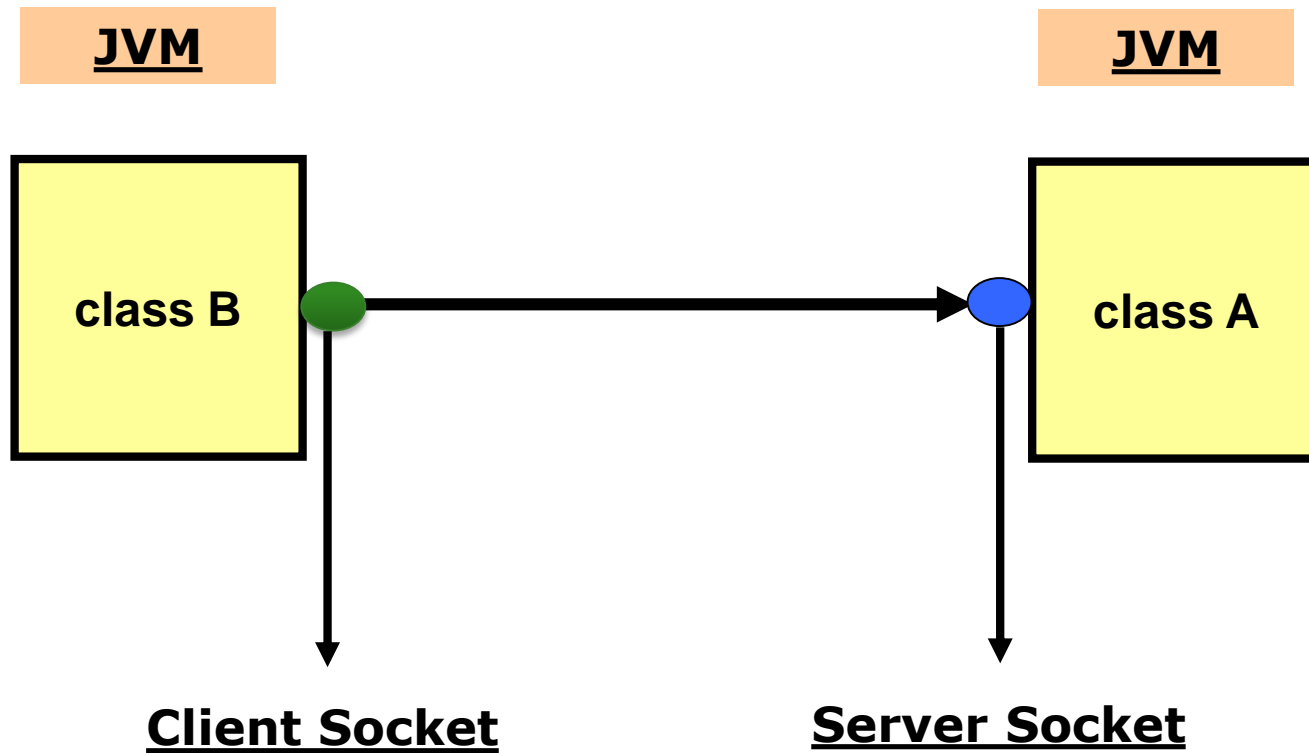**class**
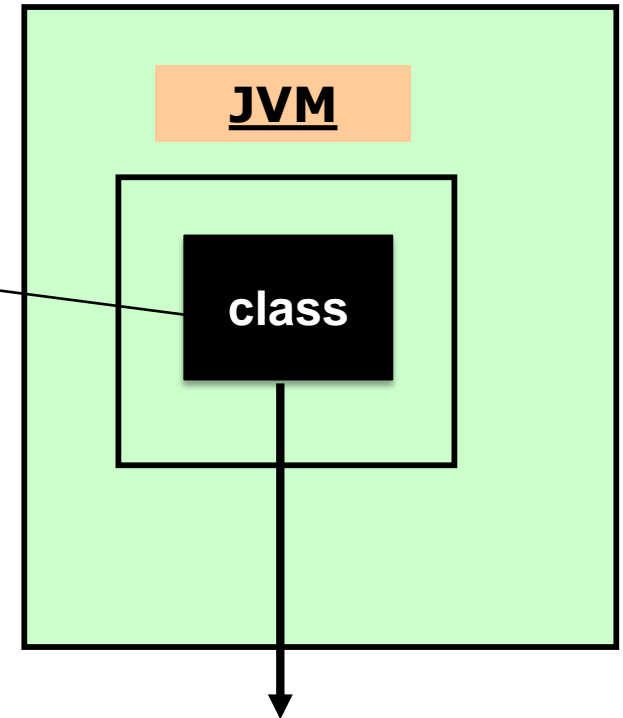
**Server**
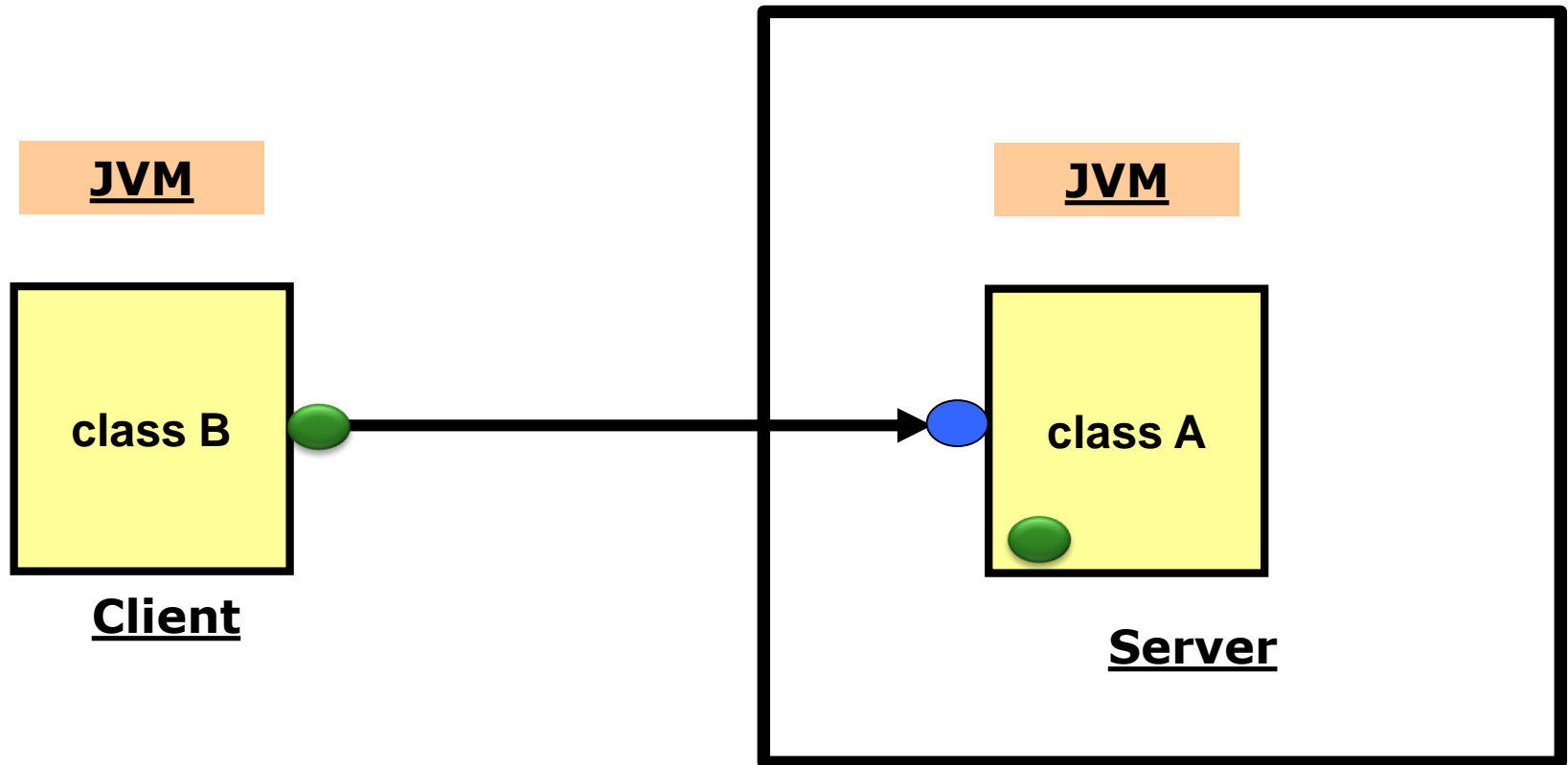
**Client**

# Distributed Application

# Networking API

- java.net.*;

ServerSocket

Socket

# Distributed Application

# Networking API

java.net.*;

**Socket(String ip,int port)** | **ServerSocket(int port)**

**Socket** accept()

OuputStream getOutputStream()

InputStream getInputStream()