

Steps to run Java COM Automation Client

1. Download and install Java Development Kit (JDK).

The implemented code uses [Oracle JDK 24](#) - [Link](#)

2. Create the following directory structure

```
com (directory)
├── automation (directory)
│   ├── server (directory)
│   │   └── JavaCOMServer.java (file)
│   └── client (directory)
│       ├── Client.java (file)
│       └── JavaCOMServer.dll (file)
```

3. Create files named as `JavaCOMServer.java` and `Client.java`
4. Copy the `JavaCOMServer.dll` in the client directory
5. Type the respective source code and replace **CLSID** with your **MyMath's CLSID** in `Client.java`
6. Compile the code from root level of the directory structure or using your own relative path

```
javac com\\automation\\server\\JavaCOMServer.java
javac com\\automation\\client\\Client.java
```

7. Run the code

```
java --enable-native-access=ALL-UNNAMED ^
-Djava.library.path=com\\automation\\client ^
-cp . com.automation.client.Client
```

Java COM Automation Code

Server

```
package com.automation.server;

public class JavaCOMServer
{
    private native boolean __initializeCOM();
    private native void __uninitializeCOM();
    private native boolean __createInstance(String clsID);
    private native int __invoke(String functionName, int num1, int num2);

    public boolean CoInitialize()
    {
        return __initializeCOM();
    }

    public boolean CoCreateInstance(String clsID)
    {
        return __createInstance(clsID);
    }

    public int Invoke(String functionName, int num1, int num2)
    {
        return __invoke(functionName, num1, num2);
    }

    public void CoUninitialize()
    {
        __uninitializeCOM();
    }
}
```

Client

```
package com.automation.client;

import com.automation.server.JavaCOMServer;
import java.util.Scanner;

public class Client
{
    public static void main(String[] args)
    {
        final String clsID = "{69DEFCBC-00E1-4817-A8D1-C608EE5C20F3}";

        System.loadLibrary("JavaCOMServer");

        JavaCOMServer server = new JavaCOMServer();

        boolean ret = server.CoInitialize();
        if (!ret)
        {
            System.err.println("Failed To Initialize COM Library ... Exiting !!!");
            System.exit(-1);
        }

        ret = server.CoCreateInstance(clsID);
        if (!ret)
        {
            System.err.println("Failed To Obtain Implemented IDispatch Interface ... E
xiting !!!");
            System.exit(-1);
        }

        Scanner scanner = new Scanner(System.in);

        System.out.print("\nEnter Number 1 = ");
```

```
int num1 = scanner.nextInt();
System.out.print("\nEnter Number 2 = ");
int num2 = scanner.nextInt();

int result = server.Invoke("SumOfTwoIntegers", num1, num2);
System.out.println("\nAddition = " + result);

result = server.Invoke("SubtractionOfTwoIntegers", num1, num2);
System.out.println("Subtraction = " + result);

scanner.close();
server.CoUninitialize();
}
}
```