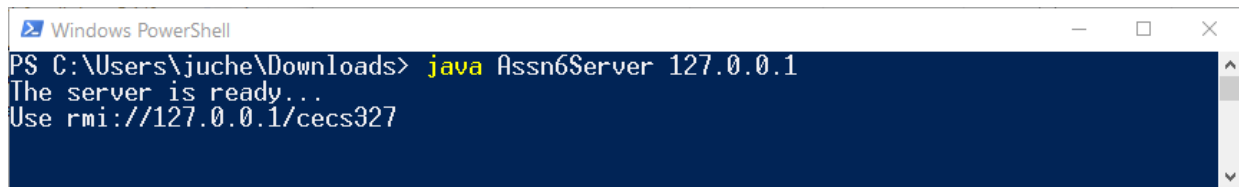


General Instruction

- You may need to do some research to complete the assignment.
 - Submit your work in the Dropbox folder via BeachBoard (Not email or in class).
-

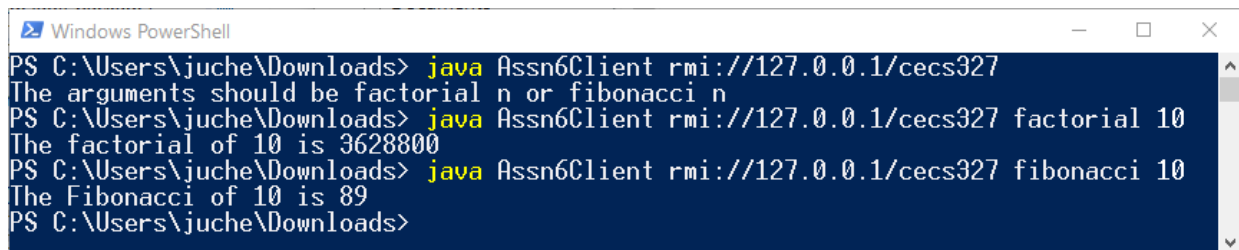
1. (20 points) Write a RMI client and server program using Java.

- The file names should be the `MethodInterface.java`, `Method.java`, `Assn6Server.java` and `Assn6Client.java`. Otherwise, you will receive **zero** point.
 - You can refer the section 5.5 in the text book and the link <http://www.ejbtutorial.com/java-rmi/new-easy-tutorial-for-java-rmi-using-eclipse>
 - The `factorial` and `fibonacci` method in the `MethodInterface.java` should be implemented in the `Method.java`.
 - The server program shall be executed by running `java Assn6Server {IP}`.
 - The client program shall be executed by running `java Assn6Client {RMI location} factorial {number}` or `java Assn6Client {RMI location} fibonacci {number}`.
 - Submit the `Method.java`, `Assn6Server.java` and `Assn6Client.java` after finishing the part (b) not (a).
- (a) Test your client and server program on your workstation using 127.0.0.1 address as shown in Figure 1 and Figure 2.
- (b) During the Lab hours, grab one of your class mate.
1. Take charge of server side or client side.
 2. Share the server's IP address.
 3. Run the server program only on the server side as shown in Figure 3.
 4. Run the client program only on the client side as shown in Figure 4.
 5. Exchange the server/client side and repeat the above procedures.
 6. If you need to update your programs from the part (a), please clearly comment on the updated part.



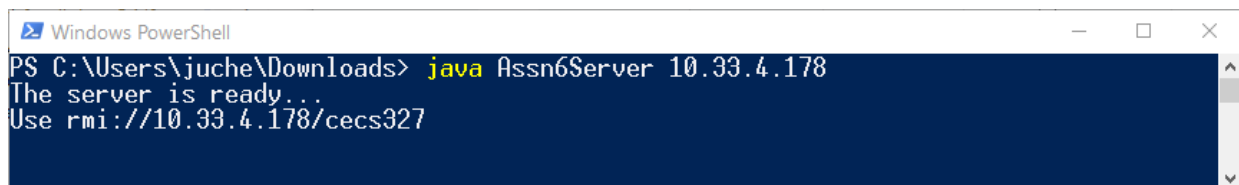
```
Windows PowerShell
PS C:\Users\juche\Downloads> java Assn6Server 127.0.0.1
The server is ready...
Use rmi://127.0.0.1/cecs327
```

Figure 1: RMI server by using a single workstation



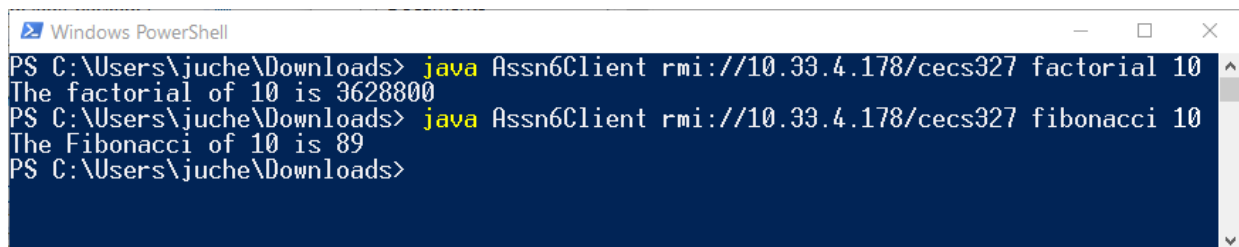
```
Windows PowerShell
PS C:\Users\juche\Downloads> java Assn6Client rmi://127.0.0.1/cecs327
The arguments should be factorial n or fibonacci n
PS C:\Users\juche\Downloads> java Assn6Client rmi://127.0.0.1/cecs327 factorial 10
The factorial of 10 is 3628800
PS C:\Users\juche\Downloads> java Assn6Client rmi://127.0.0.1/cecs327 fibonacci 10
The Fibonacci of 10 is 89
PS C:\Users\juche\Downloads>
```

Figure 2: RMI client by using a single workstation



```
Windows PowerShell
PS C:\Users\juche\Downloads> java Assn6Server 10.33.4.178
The server is ready...
Use rmi://10.33.4.178/cecs327
```

Figure 3: RMI server by using two workstations



```
Windows PowerShell
PS C:\Users\juche\Downloads> java Assn6Client rmi://10.33.4.178/cecs327 factorial 10
The factorial of 10 is 3628800
PS C:\Users\juche\Downloads> java Assn6Client rmi://10.33.4.178/cecs327 fibonacci 10
The Fibonacci of 10 is 89
PS C:\Users\juche\Downloads>
```

Figure 4: RMI client by using two workstations