

Outputs:

SirikondaP1Sender execution:

```
(base) akhilasirikonda@AKHILAs-MacBook-Air AOS_Project % javac SirikondaP1Sender.java
(base) akhilasirikonda@AKHILAs-MacBook-Air AOS_Project % java SirikondaP1Sender
Enter the PortNumber of the middleServer:
1002
Enter the IP Address of the middleServer:
localhost
Trying to connect to MidServer
Successfully connected to MidServer
Input UserName:
anna
Input Password:
a86H6T0c
>>sentToMidServer: LOGIN anna a86H6T0c

>>receivedFromMidServer: POINTS 5250
>>receivedFromMidServer: anna..You're loggedIn...!!
>>receivedFromMidServer: PORT 1060
Trying to connect to GrpServer running at 1060
Successfully connected to GrpServer
>>receivedFromGroupServer:
{Backpack=[14, 29], Alexa=[2, 100], closet=[4, 1050], Crafts=[3, 178]}

WELCOME...!!
*****
You've a total of 5250 points.
Backpack Qty:14 Price:29
Alexa Qty:2 Price:100
closet Qty:4 Price:1050
Crafts Qty:3 Price:178
Choose 1. Purchase 2. Exit
1
Input itemName:
Alexa
Currently only 2 Alexa's are left :
Enter the qty
2
Thanks for buying Alexa(2)
*****
You've a total of 5050 points.
Backpack Qty:14 Price:29
Alexa Qty:0 Price:100
closet Qty:4 Price:1050
Crafts Qty:3 Price:178
Choose 1. Purchase 2. Exit
1
Input itemName:
Crafts
Currently only 3 Crafts's are left :
Enter the qty
1
Thanks for buying Crafts(1)
*****
You've a total of 4872 points.
Backpack Qty:14 Price:29
Alexa Qty:0 Price:100
closet Qty:4 Price:1050
Crafts Qty:2 Price:178
Choose 1. Purchase 2. Exit
2
Thank you and visit again..
ShoppingCart@547a476c
>>sentToMidServer: CLOSE
(base) akhilasirikonda@AKHILAs-MacBook-Air AOS_Project %
```

SirikondaP1MidServer execution

```
(base) akhilasirikonda@AKHILAS-MacBook-Air AOS_Project % javac SirikondaP1MidServer.java
(base) akhilasirikonda@AKHILAS-MacBook-Air AOS_Project % java SirikondaP1MidServer
Enter middleServer portNo
1002
Enter GroupServer portNo:
1080
Enter GroupServer hostName:
localhost
Waiting to accept client connection
>>receivedFromSender: LOGIN anna a86H6T0c
Login successful trying to connect to grpServer
>>sentToSender: POINTS 5250
Trying to connect to GrpServer Platinum
Successfully connected to GrpServer
>>sentToGrpServer: CLIENT_INFO Platinum
>>sentToSender: anna..You're loggedIn..!!
>>receivedFromSender:
Error while reading the message sender java.util.NoSuchElementException
>>receivedFromGrpServer: PORT 1060
>>sentToSender: PORT 1060
>>receivedFromSender: CLOSE
>>sentToGrpServer: CLOSE
```

SirikondaP1GroupServer execution:

```
(base) akhilasirikonda@AKHILAS-MacBook-Air AOS_Project % java SirikondaP1GroupServer
Input GroupServer Port number:
1080
Input Platinum portNo:
1060
Input silver portNo:
1050
Input goldPort portNo:
1040
Waiting to accept midServer connection
shutdown
>>readFromMidServer:CLIENT_INFO Platinum
>>received: CLIENT_INFO Platinum
Waiting to accept client connection at port:1060
Waiting to accept client connection at port:1040
Waiting to accept client connection at port:1050
>>sentToMidServer: PORT 1060
accepted connection with silver server
receivedFromUserClient
>>readFromMidServer:CLOSE
>>received: CLOSE
At the end of shopping session. Here are the updated Item details..
{Backpack=[14, 29], Alexa=[0, 100], closet=[4, 1050], Crafts=[2, 178]}
```