

File includes 5 sample test files and results

TEST FILE 1:

ALL ADDS WITH NO VALIDATION ERRORS

- All go-karts are assigned. None available and no one waiting in queues.

DATA FILE (assn4input.txt)

```
BROKER,ADD,XYZ98765,Ringo,Starr,321-111,0.02
TRADE,BUY,MMM,999.999,99999,XYZ98765,Y
BROKER,ADD,ABC12345,George,Harrison,123-222,0.025
TRADE,BUY,DGLB,9,1022,ABC12345,N
TRADE,BUY,STCK,0.99,10,ABC12345,N
BROKER,ADD,PQR98765,John,Lennon,321-111,0.02
TRADE,BUY,FAB,100,10,PQR98765,Y
TRADE,BUY,FOUR,44.01,44,PQR98765,Y
TRADE,BUY,BEAT,123.23,1233,PQR98765,Y
BROKER,ADD,GHH98765,Eric,Clapton,321-444,0.02
TRADE,BUY,EHLP,999,99,GHH98765,Y
BROKER,ADD,ERR98765,Elenor,Rigby,321-123,0.02
TRADE,BUY,HELP,999.99,99999,ERR98765,Y
BROKER,ADD,MOH98765,Man,Onthehill,321-123,0.02
TRADE,BUY,MOTH,9.00,99999,MOH98765,Y
BROKER,ADD,BBB98765,Black,Bird,321-423,0.02
TRADE,BUY,BBF,999.00,99999,BBB98765,Y
BROKER,ADD,FMC98765,Father,McKenzie,321-423,0.02
TRADE,BUY,FMC,999.00,99999,FMC98765,Y
BROKER,ADD,YOK98765,Yoko,Ono,321-423,0.02
TRADE,BUY,YOKO,999.00,99999,YOK98765,Y
BROKER,ADD,SGT98765,Sergeant,Pepper,321-423,0.02
TRADE,BUY,SGT,9.00,9,SGT98765,Y
BROKER,ADD,IAW98765,Iam,Thewalrus,321-423,0.02
TRADE,BUY,IAW,999.00,99999,IAW98765,Y
```

DATA FILE (gokartinfo.txt)

```
REQUEST XYZ98765
REQUEST ABC12345
REQUEST PQR98765
REQUEST GHH98765
REQUEST ERR98765
REQUEST MOH98765
REQUEST BBB98765
```

AUDIT TRAIL (Test 1)

Reading Broker/Stock data from file: input/asn4input.txt

ADDED: Broker with license XYZ98765
ADDED: StockTrade with Stock symbol MMM listed by Broker XYZ98765
ADDED: Broker with license ABC12345
ADDED: StockTrade with Stock symbol DGLB listed by Broker ABC12345
ADDED: StockTrade with Stock symbol STCK listed by Broker ABC12345
ADDED: Broker with license PQR98765
ADDED: StockTrade with Stock symbol FAB listed by Broker PQR98765
ADDED: StockTrade with Stock symbol FOUR listed by Broker PQR98765
ADDED: StockTrade with Stock symbol BEAT listed by Broker PQR98765
ADDED: Broker with license GHH98765
ADDED: StockTrade with Stock symbol EHLP listed by Broker GHH98765
ADDED: Broker with license ERR98765
ADDED: StockTrade with Stock symbol HELP listed by Broker ERR98765
ADDED: Broker with license MOH98765
ADDED: StockTrade with Stock symbol MOTH listed by Broker MOH98765
ADDED: Broker with license BBB98765
ADDED: StockTrade with Stock symbol BBF listed by Broker BBB98765
ADDED: Broker with license FMC98765
ADDED: StockTrade with Stock symbol FMC listed by Broker FMC98765
ADDED: Broker with license YOK98765
ADDED: StockTrade with Stock symbol YOKO listed by Broker YOK98765
ADDED: Broker with license SGT98765
ADDED: StockTrade with Stock symbol SGT listed by Broker SGT98765
ADDED: Broker with license IAW98765
ADDED: StockTrade with Stock symbol IAW listed by Broker IAW98765

Done reading file: 25 lines read.

Reading Go-Kart data from file: input/gokartinfo.txt

Top broker Ringo Starr has been assigned go-kart number 5
Standard broker George Harrison has been assigned go-kart number 1
Standard broker John Lennon has been assigned go-kart number 2
Standard broker Eric Clapton has been assigned go-kart number 3
Top broker Elenor Rigby has been assigned go-kart number 6
Standard broker Man Onthehill has been assigned go-kart number 4
Top broker Black Bird has been assigned go-kart number 7

Done reading file: 7 lines read.

Creating go-kart usage report...

Go-Kart report finished -- located in file: output/gokartUsageReport.txt

GO-KART USAGE REPORT (Test 1)

*** GO-KART USAGE REPORT ***

CURRENT GO-KART USAGE:

George Harrison is using go-kart number 1
John Lennon is using go-kart number 2
Eric Clapton is using go-kart number 3
Man Onthehill is using go-kart number 4
Ringo Starr is using go-kart number 5
Elenor Rigby is using go-kart number 6
Black Bird is using go-kart number 7

AVAILABLE GO-KARTS:

BASIC GO-KARTS

No basic go-karts are available

RACING GO-KARTS

No racing go-karts are available

BROKER WAITING LINES:

STANDARD BROKER QUEUE

No standard brokers waiting

TOP BROKER QUEUE

No top brokers waiting

TEST 2:

ALL ADDS WITH NO VALIDATION ERRORS – ALL GO KARTS ARE RETURNED

- Brokers are added to both queues

DATA FILE (assn4input.txt)

SAME INPUT FILE AS TEST 1

DATA FILE (gokartinfo.txt)

```
REQUEST XYZ98765
REQUEST ABC12345
REQUEST PQR98765
REQUEST GHH98765
REQUEST ERR98765
REQUEST MOH98765
REQUEST BBB98765
RETURN XYZ98765
RETURN ABC12345
RETURN PQR98765
RETURN GHH98765
RETURN ERR98765
RETURN MOH98765
RETURN BBB98765
```

AUDIT TRAIL for processing file (Test 2) – assn4input.txt audit trail omitted from this point forward to save space.

Reading Go-Kart data from file: input/gokartinfo.txt

```
Top broker Ringo Starr has been assigned go-kart number 5
Standard broker George Harrison has been assigned go-kart number 1
Standard broker John Lennon has been assigned go-kart number 2
Standard broker Eric Clapton has been assigned go-kart number 3
Top broker Elenor Rigby has been assigned go-kart number 6
Standard broker Man Onthehill has been assigned go-kart number 4
Top broker Black Bird has been assigned go-kart number 7
Ringo Starr has returned go-kart number 5
George Harrison has returned go-kart number 1
John Lennon has returned go-kart number 2
Eric Clapton has returned go-kart number 3
Elenor Rigby has returned go-kart number 6
Man Onthehill has returned go-kart number 4
Black Bird has returned go-kart number 7
```

Done reading file: 14 lines read.

Creating go-kart usage report...

Go-Kart report finished -- located in file: output/gokartUsageReport.txt

GOKART USAGE REPORT (Test 2)

*** GO-KART USAGE REPORT ***

CURRENT GO-KART USAGE:

No go-karts are currently being used

AVAILABLE GO-KARTS:

BASIC GO-KARTS

Basic go-kart number 4 is available
Basic go-kart number 3 is available
Basic go-kart number 2 is available
Basic go-kart number 1 is available

RACING GO-KARTS

Racing go-kart number 7 is available
Racing go-kart number 6 is available
Racing go-kart number 5 is available

BROKER WAITING LINES:

STANDARD BROKER QUEUE

No standard brokers waiting

TOP BROKER QUEUE

No top brokers waiting

TEST 3:

ALL ADDS WITH NO VALIDATION ERRORS – BROKERS IN BOTH QUEUES

DATA FILE (assn4input.txt)

SAME INPUT FILE AS TEST 1

DATA FILE (assn4gokartinfo.txt)

```
REQUEST XYZ98765
REQUEST ABC12345
REQUEST PQR98765
REQUEST GHH98765
REQUEST ERR98765
REQUEST MOH98765
REQUEST BBB98765
REQUEST IAW98765
REQUEST SGT98765
REQUEST YOK98765
REQUEST FMC98765
```

AUDIT TRAIL for processing file (Test 3)

Reading Go-Kart data from file: input/gokartinfo.txt

```
Top broker Ringo Starr has been assigned go-kart number 5
Standard broker George Harrison has been assigned go-kart number 1
Standard broker John Lennon has been assigned go-kart number 2
Standard broker Eric Clapton has been assigned go-kart number 3
Top broker Elenor Rigby has been assigned go-kart number 6
Standard broker Man Onthehill has been assigned go-kart number 4
Top broker Black Bird has been assigned go-kart number 7
Top broker Iam Thewalrus is waiting in the top broker queue
Standard broker Sergeant Pepper is waiting in the standard broker queue
Top broker Yoko Ono is waiting in the top broker queue
Top broker Father McKenzie is waiting in the top broker queue
```

Done reading file: 11 lines read.

Creating go-kart usage report...

Go-Kart report finished -- located in file: output/gokartUsageReport.txt

GOKART USAGE REPORT (Test 3)

*** GO-KART USAGE REPORT ***

CURRENT GO-KART USAGE:

George Harrison is using go-kart number 1
John Lennon is using go-kart number 2
Eric Clapton is using go-kart number 3
Man Onthehill is using go-kart number 4
Ringo Starr is using go-kart number 5
Elenor Rigby is using go-kart number 6
Black Bird is using go-kart number 7

AVAILABLE GO-KARTS:

BASIC GO-KARTS

No basic go-karts are available

RACING GO-KARTS

No racing go-karts are available

BROKER WAITING LINES:

STANDARD BROKER QUEUE

Sergeant Pepper is waiting

TOP BROKER QUEUE

Iam Thewalrus is waiting
Yoko Ono is waiting
Father McKenzie is waiting

TEST 4:

ALL ADDS WITH NO VALIDATION ERRORS – Brokers removed from queue

- One top broker gets racing go-kart
- Next top broker get standard go-kart since no racing go-karts are available
- Two standard brokers get standard go-karts
- No one left waiting

DATA FILE (assn4input.txt)

SAME INPUT FILE AS TEST 1

DATA FILE (assn4gokartinfo.txt)

```
REQUEST XYZ98765
REQUEST ABC12345
REQUEST PQR98765
REQUEST GHH98765
REQUEST ERR98765
REQUEST MOH98765
REQUEST BBB98765
REQUEST IAW98765
REQUEST SGT98765
REQUEST YOK98765
REQUEST FMC98765
RETURN XYZ98765
RETURN MOH98765
RETURN GHH98765
RETURN PQR98765
RETURN ABC12345
RETURN ERR98765
```

AUDIT TRAIL for processing file (Test 4)

Reading Go-Kart data from file: input/gokartinfo.txt

```
Top broker Ringo Starr has been assigned go-kart number 5
Standard broker George Harrison has been assigned go-kart number 1
Standard broker John Lennon has been assigned go-kart number 2
Standard broker Eric Clapton has been assigned go-kart number 3
Top broker Elenor Rigby has been assigned go-kart number 6
Standard broker Man Onthehill has been assigned go-kart number 4
Top broker Black Bird has been assigned go-kart number 7
Top broker Iam Thewalrus is waiting in the top broker queue
Standard broker Sergeant Pepper is waiting in the standard broker queue
Top broker Yoko Ono is waiting in the top broker queue
Top broker Father McKenzie is waiting in the top broker queue
Ringo Starr has returned go-kart number 5
Top broker Iam Thewalrus has been assigned go-kart number 5
Man Onthehill has returned go-kart number 4
Top broker Yoko Ono has been assigned go-kart number 4
Eric Clapton has returned go-kart number 3
Top broker Father McKenzie has been assigned go-kart number 3
```


John Lennon has returned go-kart number 2
Standard broker Sergeant Pepper has been assigned go-kart number 2
George Harrison has returned go-kart number 1
Elenor Rigby has returned go-kart number 6
Done reading file: 17 lines read.

Creating go-kart usage report...
Go-Kart report finished -- located in file: output/gokartUsageReport.txt

REPORT (Test 4)

*** GO-KART USAGE REPORT ***

CURRENT GO-KART USAGE:

Sergeant Pepper is using go-kart number 2
Father McKenzie is using go-kart number 3
Yoko Ono is using go-kart number 4
Iam Thewalrus is using go-kart number 5
Black Bird is using go-kart number 7

AVAILABLE GO-KARTS:

BASIC GO-KARTS

Basic go-kart number 1 is available

RACING GO-KARTS

Racing go-kart number 6 is available

BROKER WAITING LINES:

STANDARD BROKER QUEUE

No standard brokers waiting

TOP BROKER QUEUE

No top brokers waiting

TEST 5:

ALL ADDS WITH NO VALIDATION ERRORS – Brokers removed from queue

- **One top broker gets racing go-kart**
- **Next top broker get standard go-kart since no racing go-karts are available**
- **Two standard brokers get standard go-karts**
- **No one left waiting**

DATA FILE (assn4input.txt)

SAME INPUT FILE AS TEST 1

DATA FILE (assn4gokartinfo.txt)

EMPTY, contains no requests or returns.

AUDIT TRAIL for processing file (Test 5)

Reading Go-Kart data from file: input/gokartinfo.txt

Done reading file: 0 lines read.

Creating go-kart usage report...

Go-Kart report finished -- located in file: output/gokartUsageReport.txt

REPORT (Test 5)

*** GO-KART USAGE REPORT ***

CURRENT GO-KART USAGE:

No go-karts are currently being used

AVAILABLE GO-KARTS:

BASIC GO-KARTS

Basic go-kart number 1 is available

Basic go-kart number 2 is available

Basic go-kart number 3 is available

Basic go-kart number 4 is available

RACING GO-KARTS

Racing go-kart number 5 is available

Racing go-kart number 6 is available

Racing go-kart number 7 is available

BROKER WAITING LINES:

STANDARD BROKER QUEUE

No standard brokers waiting

TOP BROKER QUEUE

No top brokers waiting