Project Report

#1 Model-based testing of the VendingMachine class:

Transition pair testing:

1) Idle:
   Incoming: T1, T2, T3, T15, T14, T13, T12, T11, T10, T6, T8, T9, T4
   Outgoing: T2, T3, T6, T4, T5

   Transition pairs:

(T1, T2)	(T1, T3)	(T1, T6)	(T1, T4)	(T1, T5)	(T1, T7)
(T2, T2)	(T2, T3)	(T2, T6)	(T2, T4)	(T2, T5)	(T2, T7)
(T3, T2)	(T3, T3)	(T3, T6)	(T3, T4)	(T3, T5)	(T3, T7)
(T15, T2)	(T15, T3)	(T15, T6)	(T15, T4)	(T15, T5)	(T15, T7)
(T14, T2)	(T14, T3)	(T14, T6)	(T14, T4)	(T14, T5)	(T14, T7)
(T13, T2)	(T13, T3)	(T13, T6)	(T13, T4)	(T13, T5)	(T13, T7)
(T12, T2)	(T12, T3)	(T12, T6)	(T12, T4)	(T12, T5)	(T12, T7)
(T11, T2)	(T11, T3)	(T11, T6)	(T11, T4)	(T11, T5)	(T11, T7)
(T10, T2)	(T10, T3)	(T10, T6)	(T10, T4)	(T10, T5)	(T10, T7)
(T6, T2)	(T6, T3)	(T6, T6)	(T6, T4)	(T6, T5)	(T6, T7)
(T8, T2)	(T8, T3)	(T8, T6)	(T8, T4)	(T8, T5)	(T8, T7)
(T9, T2)	(T9, T3)	(T9, T6)	(T9, T4)	(T9, T5)	(T9, T7)
(T4, T2)	(T4, T3)	(T4, T6)	(T4, T4)	(T4, T5)	(T4, T7)

2) Coin Inserted:
   Incoming: T20, T21, T23, T19, T7
   Outgoing: T11, T12, T20, T21, T22, T25, T19, T10, T24

   Transition pairs:

(T20, T11)	(T20, T12)	(T20, T20)	(T20, T21)	(T20, T22)
(T20, T25)	(T20, T19)	(T20, T10)	(T21, T11)	(T21, T12)
(T21, T20)	(T21, T21)	(T21, T22)	(T21, T25)	(T21, T19)
(T21, T10)	(T23, T11)	(T23, T12)	(T23, T20)	(T23, T21)
(T23, T22)	(T23, T25)	(T23, T19)	(T23, T10)	(T19, T11)
(T19, T12)	(T19, T20)	(T19, T21)	(T19, T22)	(T19, T25)

(T19, T19)	(T19, T10)	(T7, T11)	(T7, T12)	(T7, T20)
(T7, T21)	(T7, T22)	(T7, T25)	(T7, T19)	(T7, T10)
(T20, T24)	(T21, T24)	(T23, T24)	(T19, T24)	(T7, T24)

3) Sugar:
   Incoming: T16, T17, T18, T22
   Outgoing: T13, T14, T15, T16, T17, T18, T23, T26, T27

   Transition pairs:

(T16, T13)	(T16, T14)	(T16, T15)	(T16, T16)	(T16, T17)
(T16, T18)	(T16, T23)	(T16, T26)	(T16, T27)	(T17, T13)
(T17, T14)	(T17, T15)	(T17, T16)	(T17, T17)	(T17, T18)
(T17, T23)	(T17, T26)	(T17, T27)	(T18, T13)	(T18, T14)
(T18, T15)	(T18, T16)	(T18, T17)	(T18, T18)	(T18, T23)
(T18, T26)	(T18, T27)	(T22, T13)	(T22, T14)	(T22, T15)
(T22, T16)	(T22, T17)	(T22, T18)	(T22, T23)	(T22, T26)
(T22, T27)				

4) No small cups:
   Incoming: T25, T27, T28
   Outgoing: T9, T28

   Transition pairs:

(T25, T9)	(T25, T28)
(T27, T9)	(T27, T28)
(T28, T9)	(T28, T28)

5) No large cups:
   Incoming: T24, T26, T29
   Outgoing: T8, T29

   Transition pairs:

(T24, T8)	(T24, T29)
(T26, T8)	(T26, T29)
(T29, T8)	(T29, T29)

Test Cases:

ID	Test Case	Coverage of Transitions (T)	Coverage of new Transition-pairs
Test#1	SetPrice 24 InsertLargeCups 5 Coin LargeCup Coffee Dispose	1,4,2,7,19,12,5	(T1, T4), (T4, T2), (T2, T7), (T7, T19), (T19, T12), (T12, T5)
Test#2	SetPrice 24 InsertLargeCups 5 Coin Coin Coin Sugar LargeCup Coffee Dispose	1,4,2,7,20, 20, 22, 18, 13, 5	(T7, T20), (T20, T22), (T22, T18), (T18, T13), (T13, T5), (T20, T20)
Test#3	SetPrice 24 InsertSmallCups 5 Coin Coin SmallCup Coffee Dispose	1,4,3,7,20,21,11,5	(T4, T3), (T3, T7), (T20, T21), (T21, T11), (T11, T5)
Test#4	SetPrice 24 InsertSmallCups 5 Coin Cancel Coin SmallCup Coffee Dispose	1, 4, 3, 7, 10, 7, 20, 21, 11, 5	(T7, T10), (T10, T7)
Test#5	InsertLargeCups 5 Dispose	1,2,5	(T1, T2), (T2, T5)
Test#6	InsertSmallCups 5 Dispose	1,3,5	(T1, T3), (T3, T5)
Test#7	Coin Dispose	1,6,5	(T1, T6), (T6, T5)
Test#8	SetPrice 24 Dispose	1,4,5	(T4, T5)
Test#9	Dispose	1,5	(T1, T5)
Test#10	InsertLargeCups 5 InsertLargeCups 5 InsertSmallCups 5 InsertLargeCups 5 InsertSmallCups 5 InsertSmallCups 5 SetPrice 26 InsertSmallCups 5 Coin InsertSmallCups 5 SetPrice 26 InsertLargeCups 5 SetPrice 26 SetPrice 26 Dispose	1,2,2,3,2,3,3, 4, 3, 6, 3, 4, 2, 4, 4, 5	(T2, T2), (T2, T3), (T3, T2), (T3, T3), (T3, T6), (T6, T3), (T3, T4), (T2, T6), (T2, T4), (T4, T6), (T6, T4), (T4, T4),
Test#11	SetPrice 200 Coin Coin InsertLargeCups 5 Dispose	1,4,6,6, 2, 5	(T6, T6), (T6, T2)
Test#12	InsertLargeCups 5 SetPrice 26 Coin Coin LargeCup Cancel Coin Dispose	1,2,4,6,7, 19, 10, 6, 5	(T6, T7)
Test#13	SetPrice 24 InsertSmallCups 5 Coin SmallCup Coffee InsertSmallCups 5 Dispose	1,4,3,7, 20, 21, 11, 3, 5	(T11, T3)
Test#14	InsertLargeCups 5 SetPrice 24 Coin LargeCup Coffee InsertLargeCups 5 Dispose	1,2, 4, 7,19, 12, 2, 5	(T12, T2), (T4, T7)

Test#15	SetPrice 24 InsertLargeCups 5 Coin LargeCup Coffee InsertSmallCups 5 Dispose	1,4,2,7,19,12, 3, 5	(T12, T3)
Test#16	SetPrice 24 InsertLargeCups 5 Coin LargeCup Coffee SetPrice 24 Dispose	1,4,2,7,19,12, 4, 5	(T12, T4)
Test#17	SetPrice 26 InsertLargeCups 5 Coin Coin LargeCup Coin Coffee Coin Dispose	1,4,2, 6, 7,19, 20, 12, 6, 5	(T12, T6), (T20, T12)
Test#18	SetPrice 24 InsertSmallCups 5 Coin SmallCup Coin Coffee InsertLargeCups 5 Dispose	1, 4, 3, 7, 21, 20, 11, 2, 5	(T7, T21), (T21, T20), (T20, T11), (T11, T2)
Test#19	SetPrice 24 InsertSmallCups 5 Coin Cancel SetPrice 26 Coin Coin Cancel Coin SetPrice 24 Coin Cancel InsertLargeCups 5 Coin Cancel InsertSmallCups 5 Coin Cancel Dispose	1, 4, 3, 7, 10, 4, 6, 7, 10, 6, 4, 7, 10, 2, 7, 10, 3, 7, 10, 5	(T10, T2), (T10, T3), (T10, T6), (T10, T4), (T10, T5)
Test#20	SetPrice 24 InsertLargeCups 5 Coin Coin Sugar Coin LargeCup LargeCup Coffee InsertLargeCups 5 Dispose	1,4,2,7,20, 22, 16, 18, 18, 13, 2, 5	(T22, T16), (T16, T18), (T18, T18),
Test#21	SetPrice 24 InsertSmallCups 5 Coin Coin Sugar SmallCup Coin SmallCup SmallCup Sugar Sugar Sugar Sugar LargeCup SmallCup LargeCup SmallCup Coffee Dispose	1,4,3,7,20, 22, 17, 16, 17, 17, 23, 22, 23, 22, 18, 17, 18, 17, 15, 5	(T22, T17), (T17, T16), (T16, T17), (T17, T17), (T17, T23), (T23, T22), (T22, T18), (T18, T17), (T17, T15), (T15, T5), (T17, T18), (T22, T23), (T13, T2)
Test#22	SetPrice 24 InsertLargeCups 5 Coin Coin Sugar Sugar SmallCup Sugar Sugar LargeCup Sugar Sugar Coin Sugar Sugar Coffee Dispose	1, 4, 2, 7, 22, 23, 21, 22, 23, 19, 22, 23, 20, 22, 23, 12, 5	(T7, T22), (T23, T21), (T21, T22), (T23, T19), (T19, T22), (T23, T20), (T23, T12)
Test#23	SetPrice 24 InsertSmallCups 5 Coin Sugar Sugar SmallCup SmallCup LargeCup LargeCup SmallCup Sugar Sugar Cancel Coin Sugar SmallCup Sugar Coffee SetPrice 26 Coin Coin SmallCup Coffee Coin Dispose	1, 3, 7, 22, 23, 21, 21, 19, 19, 21, 22, 23, 10, 7, 22, 17, 23, 11, 4, 6, 7, 21, 11, 6, 5	(T21, T19), (T19, T19), (T19, T21), (T21, T21), (T23, T10), (T23, T11), (T11, T6), (T11, T4),
Test#24	InsertLargeCups 1 SetPrice 25 Coin Sugar Coin Coin Cancel Coin Sugar LargeCup Coin Coffee Coin Coin InsertLargeCups 1 Dispose	1, 2, 4, 7, 22, 16, 16, 14, 7, 22, 18, 16, 26, 29, 29, 8, 5	(T16, T16), (T16, T14), (T18, T16), (T16, T26), (T26, T29), (T29, T29), (T29, T8), (T8, T5)
Test#25	InsertLargeCups 5 SetPrice 25 Coin LargeCup Sugar Coin Coffee InsertSmallCups 2 Coin Sugar Coin	1, 2, 4, 7, 19, 22, 16, 13, 3, 7, 22, 16, 23, 22, 17, 16, 15, 7, 21,	(T16, T13), (T13, T3), (T16, T23), (T16, T15), (T15, T7), (T16, T27),

	Sugar Sugar SmallCup Coin Coffee Coin SmallCup Sugar Coin Coffee Coin Coin InsertSmallCups 2 Dispose	22, 16, 27, 28, 28, 9, 5	(T27, T28), (T28, T9), (T28, T28), (T9, T5)
Test#26	InsertSmallCups 1 SetPrice 25 Coin Sugar SmallCup Cancel Coin Sugar SmallCup Coffee InsertSmallCups 1 SetPrice 25 Dispose	1, 3, 4, 7, 22, 17, 14, 7, 22, 17, 27, 9, 4, 5	(T17, T14), (T14, T7), (T17, T27), (T27, T9), (T9, T4)
Test#27	InsertLargeCups 1 SetPrice 25 Coin Sugar LargeCup Cancel InsertSmallCups 1 InsertLargeCups 1 Coin Sugar LargeCup Sugar Sugar LargeCup Coffee InsertLargeCups 5 SetPrice 25 Dispose	1, 2, 4, 7, 22, 18, 14, 3, 2, 7, 22, 18, 23, 22, 18, 26, 8, 4, 5	(T18, T14), (T14, T3), (T18, T23), (T18, T26), (T26, T8), (T8, T4)
Test#28	InsertLargeCups 2 SetPrice 25 Coin LargeCup Sugar Coffee Coin LargeCup Sugar Coffee InsertLargeCups 5 InsertSmallCups 2 Coin SmallCup Sugar Cancel SetPrice 25 Coin SmallCup Sugar Coffee SetPrice 25 Coin SmallCup Sugar Coffee InsertSmallCups 5 InsertLargeCups 5 Dispose	1, 3, 4, 7, 19, 22, 13, 7, 19, 22, 26, 8, 3, 7, 21, 22, 14, 2, 3, 7, 21, 22, 15, 4, 7, 21, 22, 27, 9, 2, 5	(T22, T13), (T13, T7), (T22, T14), (T14, T2), (T22, T15), (T15, T4), (T22, T26), (T8, T3), (T22, T27)
Test#29	SetPrice 26 InsertLargeCups 1 Coin Coin Coin Cancel Coin Coin Coin LargeCup Coin Coffee InsertLargeCups 5 Coin InsertSmallCups 1 Coin SmallCup Coin Coffee InsertSmallCups 5 Coin Dispose	1, 4, 2, 6, 7, 20, 10, 6, 7, 20, 19, 20, 24, 8, 6, 3, 7, 21, 20, 25, 9, 6, 5	(T20, T25), (T20, T19), (T20, T10), (T20, T24), (T24, T8), (T8, T6), (T9, T6), (T25, T9)
Test#30	SetPrice 25 InsertSmallCups 1 Coin SmallCup Cancel Coin SmallCup Coffee Coin InsertSmallCups 2 InsertSmallCups 4 Dispose	1, 4, 3, 7, 21, 10, 7, 21, 25, 28, 9, 3, 5	(T21, T25), (T21, T10), (T25, T28), (T9, T3)
Test#31	SetPrice 25 InsertSmallCups 2 Coin SmallCup Coffee Coin SmallCup Sugar Sugar Coffee InsertSmallCups 5 Coin Cancel InsertLargeCups 2 Coin LargeCup Coffee Coin SmallCup Sugar Sugar Coffee Coin InsertLargeCups 5 Coin Cancel Dispose	1,4, 3, 7, 21, 11, 7, 21, 22, 23, 25, 9, 7, 10, 2, 7, 19, 12, 7,19, 22, 23, 24, 29, 8, 7, 10, 5	(T23, T25), (T23, T24), (T24, T29), (T12, T7), (T11, T7), (T8, T7), (T9, T7)
Test#32	SetPrice 25 InsertLargeCups 1 Coin Cancel Coin LargeCup Coffee InsertLargeCups 5 InsertLargeCups 5 Dispose	1,4, 2, 7, 19, 10, 7, 19, 24, 8, 2, 5	(T19, T10), (T19, T24), (T8, T2)

Test#33	SetPrice 25 InsertSmallCups 5 Coin Sugar SmallCup Coffee InsertSmallCups 5 Coin Sugar SmallCup Coffee InsertLargeCups 5 Coin Sugar LargeCup Coffee SetPrice 25 Coin Sugar LargeCup Coffee SetPrice 25 Coin Sugar Cancel Dispose	1, 4, 3, 7, 22, 17, 15, 3, 7, 22, 17, 15, 3, 7, 22, 17, 15, 2, 7, 22, 18, 13, 4, 7, 22, 14, 4, 7, 22, 14, 5	(T15, T2), (T15, T3), (T14, T4), (T14, T5), (T13, T4)
Test#34	SetPrice 26 InsertSmallCups 5 Coin Coin Sugar SmallCup Coffee Coin Coin Sugar Cancel Coin InsertLargeCups 5 Coin Sugar LargeCup Coffee Coin Dispose	1, 4, 3, 6, 7, 22, 17, 15, 6, 7, 22, 14, 6, 2, 7, 22, 18, 13, 6, 5	(T15, T6), (T14, T6), (T13, T6),

Non-executable transition pairs:

➤ (T1, T7), (T21, T12), (T19, T11), (T19, T25), (T7, T11), (T7, T12), (T7, T25), (T21, T24), (T7, T24), (T17, T13), (T17, T26), (T18, T15), (T18, T27)

#2 Testing default (ghost) transitions of the VendingMachine class:

Default Transitions:

Strat state: -

Default transitions: Not possible. Cannot write test case when object is not created. When object is created then the constructer is called and program moves to Idle state.

Non-executable default transitions: InsertLargeCups(n), InsertSmallCups(n), SmallCup, LargeCup, Sugar, Coffee, SetPrice(p), Cancel, Coin, Dispose

Idle state: -

Default transitions: InsertLargeCups(n) [n<=0], InsertSmallCups(n)[n<=0], SmallCup, LargeCup, Sugar, Coffee, SetPrice(p)[p<=0], Cancel, Coin [(t+25>=price)&&(price<=0)]

Test#35: **InsertLargeCups 0 InsertSmallCups 0 SmallCup LargeCup Sugar Coffee SetPrice 0 Cancel Coin** Dispose

Coins inserted: -

Default transitions: Coffee [(k < 1) && (k1 < 1)], Coffee [(k>=1)&&(s != 1)], Coffee[(k1>=1)&&(s!=2)], InsertLargeCups(n), InsertSmallCups(n), SetPrice(p), Dispose

Test#36: SetPrice 25 Coin **Coffee InsertLargeCups 1 InsertSmallCups 1 SetPrice 1 Dispose** Cancel InsertLargeCups 5 Coin SmallCup **Coffee** Cancel Dispose

Test#37: SetPrice 25 InsertSmallCups 5 Coin LargeCup **Coffee** Cancel Dispose

Sugar: -

Default transitions: Coffee [(k < 1) && (k1 < 1)], Coffee [(k>=1)&&(s != 1)], Coffee[(k1>=1)&&(s!=1)], InsertLargeCups(n), InsertSmallCups(n), SetPrice(p), Dispose

Test#38: SetPrice 25 Coin Sugar **Coffee InsertLargeCups 1 InsertSmallCups 1 SetPrice 1 Dispose** Cancel InsertLargeCups 5 Coin Sugar SmallCup **Coffee** Cancel Dispose

Test#39: SetPrice 25 InsertSmallCups 5 Coin Sugar LargeCup **Coffee** Cancel Dispose

No large cups: -

Default transitions: InsertLargeCups(n)[n<=0], SmallCup, LargeCup, Sugar, Coffee, InsertSmallCups(n), SetPrice(p), Cancel, Dispose

Test#40: InsertLargeCups 1 SetPrice 25 Coin LargeCup Coffee **InsertLargeCups 0, SmallCup, LargeCup Sugar Coffee InsertSmallCups 5 SetPrice 5 Cancel Dispose** InsertLargeCups 5 Dispose

<u>No small_cups: -</u>

Default transitions: InsertLargeCups(n), SmallCup, LargeCup, Sugar, Coffee, InsertSmallCups(n)[n<=0], SetPrice(p), Cancel, Dispose

Test#41: InsertSmallCups 1 SetPrice 25 Coin SmallCup Coffee **InsertLargeCups 5, SmallCup, LargeCup Sugar Coffee InsertSmallCups 0 SetPrice 0 Cancel Dispose** InsertSmallCups 5 Dispose

#3 Multiple-condition testing

Coin()

1) (x==1)

	C1	Test # that executes this condition
1	T	1
2	F	2

2) ((t+25>=w)&&(w>0))

	C1	C2	Test # that executes this condition
1	T	T	1
2	T	F	7
3	F	T	10
4	F	F	Non-Executable

3) (t+25<w)

	C1	Test # that executes this condition
1	T	10
2	F	35

4) ((x>1)&&(x<6))

	C1	C2	Test # that executes this condition
1	T	T	17
2	T	F	Non-Executable
3	F	T	Non-Executable
4	F	F	Non-Executable

SmallCup()

5) ((x==2)||(x==3))

	C1	C2	Test # that executes this condition
1	T	T	Non-Executable
2	T	F	3
3	F	T	21
4	F	F	35

LargeCup()

6) ((x==2)||(x==3))

	C1	C2	Test # that executes this condition
1	T	T	Non-Executable
2	T	F	1
3	F	T	20
4	F	F	35

Sugar()

7) ((x==2)||(x==3))

	C1	C2	Test # that executes this condition
1	T	T	Non-Executable
2	T	F	2
3	F	T	21
4	F	F	35

8) (x==2)

	C1	Test # that executes this condition
1	T	2
2	F	21

Coffee()

9) ((x==2)||(x==3))

	C1	C2	Test # that executes this condition
1	T	T	Non-Executable
2	T	F	1
3	F	T	2
4	F	F	35

10) ((x==2)&&(k>1)&&(s==2))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	3
2	T	T	F	31
3	T	F	T	29
4	T	F	F	1
5	F	T	T	21
6	F	T	F	33

7	F	F	T	25
8	F	F	F	2

11) ((x==2)&&(k1>1)&&(s==1))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	1
2	T	T	F	29
3	T	F	T	29
4	T	F	F	30
5	F	T	T	2
6	F	T	F	25
7	F	F	T	24
8	F	F	F	21

12) ((x==2)&&(k1==1)&&(s==1))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	29
2	T	T	F	42
3	T	F	T	37
4	T	F	F	29
5	F	T	T	24
6	F	T	F	43
7	F	F	T	2
8	F	F	F	21

13) ((x==2)&&(k==1)&&(s==2))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	29
2	T	T	F	44
3	T	F	T	36
4	T	F	F	36
5	F	T	T	46
6	F	T	F	45
7	F	F	T	21
8	F	F	F	24

14) ((x==3) &&(k==1)&&(s==2))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	25
2	T	T	F	27
3	T	F	T	21
4	T	F	F	2
5	F	T	T	Non-Executable
6	F	T	F	48
7	F	F	T	36
8	F	F	F	36

15) ((x==3)&&(k1==1)&&(s==1))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	24
2	T	T	F	43
3	T	F	T	2
4	T	F	F	21
5	F	T	T	Non-Executable
6	F	T	F	42
7	F	F	T	37
8	F	F	F	36

16) ((x==3)&&(k>1)&&(s==2))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	21
2	T	T	F	33
3	T	F	T	38
4	T	F	F	2
5	F	T	T	Non-Executable
6	F	T	F	37
7	F	F	T	36
8	F	F	F	36

17) ((x==3) &&(k1>1)&&(s==1))

	C1	C2	C3	Test # that executes this condition
1	T	T	T	2
2	T	T	F	38
3	T	F	T	39
4	T	F	F	38

5	F	T	T	Non-Executable
6	F	T	F	36
7	F	F	T	37
8	F	F	F	36

InsertLargeCups(int n)

18) ((x==1)&&(n>0))

	C1	C2	Test # that executes this condition
1	T	T	1
2	T	F	35
3	F	T	24
4	F	F	40

19) ((x==5) &&(n>0))

	C1	C2	Test # that executes this condition
1	T	T	24
2	T	F	40
3	F	T	36
4	F	F	35

InsertSmallCups(int n)

20) ((x==1)&&(n>0))

	C1	C2	Test # that executes this condition
1	T	T	3
2	T	F	35
3	F	T	25
4	F	F	41

21) ((x==4)&&(n>0))

	C1	C2	Test # that executes this condition
1	T	T	25
2	T	F	41
3	F	T	36
4	F	F	35

SetPrice(int p)

22) ((x==1)&&(p>0))

	C1	C2	Test # that executes this condition
1	T	T	1
2	T	F	35
3	F	T	36
4	F	F	41

Cancel()

23) ((x==2)||(x==3))

	C1	C2	Test # that executes this condition
1	T	T	Non-Executable
2	T	F	4
3	F	T	24
4	F	F	35

Dispose()

24) ((x==1))

	C1	Test # that executes this condition
1	T	1
2	F	36

❖ **Additional Test Cases**

Test ID	Test Case
Test#42	SetPrice 25 InsertLargeCups 1 Coin SmallCup Coffee Cancel Dispose
Test#43	SetPrice 25 InsertLargeCups 1 Coin Sugar SmallCup Coffee Cancel Dispose
Test#44	SetPrice 25 InsertSmallCups 1 Coin LargeCup Coffee Cancel Dispose
Test#45	SetPrice 25 InsertSmallCups 1 Coin Sugar LargeCup Coffee Cancel Dispose
Test#46	SetPrice 25 InsertSmallCups 1 Coin Sugar SmallCup Coffee InsertSmallCups 5 Dispose
Test#47	InsertSmallCups 1 SetPrice 25 Coin SmallCup Coffee InsertSmallCups 5 Dispose
Test#48	InsertSmallCups 1 SetPrice 25 Coin Coffee Cancel Dispose

#4 All the test cases are mentioned in the TS.txt file.

#5 Execution of all test cases.

The code folder has **main.exe** it is an executable use it to run all the test cases.

Test Case	Valid/ Invalid	Result/ output
Test#1	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 4, k = 0, t = 0
Test#2	Valid	SetPrice() function called. P = 24 returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

		Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 4, k = 0, t = 0
Test#3	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0

		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 0, k = 4, t = 0
Test#4	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 0, k = 4, t = 0
Test#5	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 5, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 0, k1 = 5, k = 0, t = 0
Test#6	Valid	InsertSmallCups() function called.

		returned value: 1 Private variables: x = 1, w = 0, k1 = 0, k = 5, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 0, k1 = 0, k = 5, t = 0
Test#7	Valid	Coin() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 0, k1 = 0, k = 0, t = 0
Test#8	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 0, k = 0, t = 0
Test#9	Valid	Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 0, k1 = 0, k = 0, t = 0
Test#10	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 5, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 10, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 10, k = 5, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 15, k = 5, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 15, k = 10, t = 0

		InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 15, k = 15, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 15, k = 15, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 15, k = 20, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 15, k = 20, t = 25 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 15, k = 25, t = 25 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 15, k = 25, t = 25 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 20, k = 25, t = 25 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 20, k = 25, t = 25 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 20, k = 25, t = 25 Dispose()function called. 24) if (x == 1): 1 SHUT DOWN returned value: 1 Private variables: x = 6, w = 26, k1 = 20, k = 25, t = 25
Test#11	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 200, k1 = 0, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 200, k1 = 0, k = 0, t = 25

		Coin() function called. returned value: 1 Private variables: x = 1, w = 200, k1 = 0, k = 0, t = 50 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 200, k1 = 5, k = 0, t = 50 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 200, k1 = 5, k = 0, t = 50
Test#12	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 5, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 25 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 26, k1 = 5, k = 0, t = 25
Test#13	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0

		InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coffee() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 9, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 0, k = 9, t = 0
Test#14	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 5, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 9, k = 0, t = 0

		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 9, k = 0, t = 0
Test#15	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 5, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 4, k = 5, t = 0
Test#16	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

		Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 4, k = 0, t = 0
Test#17	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 26, k1 = 4, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 4, k = 0, t = 25

		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 26, k1 = 4, k = 0, t = 25
Test#18	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 5, k = 4, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 5, k = 4, t = 0
Test#19	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

| | | Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 25

Coin() function called.
returned value: 1
Private variables: x = 2, w = 26, k1 = 0, k = 5, t = 0

Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 25

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 25

Coin() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0

InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 24, k1 = 5, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 5, t = 0

Cancel() function called.
RETURN COINS
returned value: 1 |

		Private variables: x = 1, w = 24, k1 = 5, k = 5, t = 0
		
		       InsertSmallCups() function called.
		returned value: 1
		Private variables: x = 1, w = 24, k1 = 5, k = 10, t = 0
		
		       Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 24, k1 = 5, k = 10, t = 0
		
		       Cancel() function called.
		RETURN COINS
		returned value: 1
		Private variables: x = 1, w = 24, k1 = 5, k = 10, t = 0
		
		       Dispose()function called.
		SHUT DOWN
		returned value: 1
		Private variables: x = 6, w = 24, k1 = 5, k = 10, t = 0

Test#20	Valid	SetPrice() function called.
		returned value: 1
		Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0
		
		       InsertLargeCups() function called.
		returned value: 1
		Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0
		
		       Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0
		
		       Coin() function called.
		RETURN COIN
		returned value: 1
		Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0
		
		       Sugar() function called.
		returned value: 1
		Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0
		
		       Coin() function called.
		RETURN COIN
		returned value: 1
		Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0
		
		       LargeCup() function called.
		returned value: 1

		Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 9, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 9, k = 0, t = 0
Test#21	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0

		SmallCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 0, k = 4, t = 0
Test#22	Valid	SetPrice() function called.

| | | returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0

InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 24, k1 = 5, k = 0, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

LargeCup() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0

Coin() function called.
RETURN COIN
returned value: 1 |

		Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 5, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 5, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 24, k1 = 4, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 24, k1 = 4, k = 0, t = 0
Test#23	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

LargeCup() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 3, w = 24, k1 = 0, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 24, k1 = 0, k = 5, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE

returned value: 1
Private variables: x = 1, w = 24, k1 = 0, k = 4, t = 0

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 0

Coin() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 25

		Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 0, k = 4, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 0, k = 4, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 3, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 3, t = 25 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 26, k1 = 0, k = 3, t = 25
Test#24	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 1, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Cancel() function called. RETURN COINS

		returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0
		Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0
		Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0
		LargeCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0
		Coin() function called. RETURN COIN returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0
		Coffee() function called. DISPOSE LARGE CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0
		Coin() function called. RETURN COIN returned value: 1 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0
		Coin() function called. RETURN COIN returned value: 1 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0
		InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0
		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 1, k = 0, t = 0
Test#25	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 5, k = 0, t = 0

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0

LargeCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 0, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 0, t = 0

Coffee() function called.
DISPOSE LARGE CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 0, t = 0

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 2, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 4, k = 2, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 2, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 2, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 4, k = 2, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 2, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 2, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 2, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 1, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 4, k = 1, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 4, k = 1, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 1, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 1, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 4, w = 25, k1 = 4, k = 0, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 4, w = 25, k1 = 4, k = 0, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 4, w = 25, k1 = 4, k = 0, t = 0

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 2, t = 0

Dispose()function called.

		SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 4, k = 2, t = 0
Test#26	Valid	InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 0, k = 1, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0

		SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 1, t = 0
Test#27	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 1, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 1, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 2, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 2, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 2, k = 1, t = 0 LargeCup() function called.

		returned value: 1 Private variables: x = 3, w = 25, k1 = 2, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 2, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 2, k = 1, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 2, k = 1, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 1, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 6, k = 1, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 6, k = 1, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 6, k = 1, t = 0
Test#28	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 2, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 2, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 2, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 2, k = 0, t = 0 Sugar() function called.

returned value: 1
Private variables: x = 3, w = 25, k1 = 2, k = 0, t = 0

          Coffee() function called.
DISPOSE LARGE CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0

          Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0

          LargeCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0

          Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0

          Coffee() function called.
DISPOSE LARGE CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0

          InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0

          InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 2, t = 0

          Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 2, t = 0

          SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 2, t = 0

          Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 2, t = 0

          Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 2, t = 0

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 2, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 2, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 2, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 2, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 1, t = 0

SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 1, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 1, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 1, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 1, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 4, w = 25, k1 = 5, k = 0, t = 0

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 5, t = 0

InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 10, k = 5, t = 0

Dispose()function called.

		SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 10, k = 5, t = 0
Test#29	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 1, k = 0, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 26, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 1, k = 0, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0 Coin() function called. RETURN COIN

returned value: 1
Private variables: x = 2, w = 26, k1 = 1, k = 0, t = 0

Coffee() function called.
DISPOSE LARGE CUP OF COFFEE

returned value: 1
Private variables: x = 5, w = 26, k1 = 0, k = 0, t = 0

InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 0

Coin() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 5, k = 0, t = 25

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 5, k = 1, t = 25

Coin() function called.
returned value: 1
Private variables: x = 2, w = 26, k1 = 5, k = 1, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 26, k1 = 5, k = 1, t = 0

Coin() function called.
RETURN COIN
returned value: 1
Private variables: x = 2, w = 26, k1 = 5, k = 1, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE
returned value: 1
Private variables: x = 4, w = 26, k1 = 5, k = 0, t = 0

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 5, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 1, w = 26, k1 = 5, k = 5, t = 25

Dispose()function called.
SHUT DOWN
returned value: 1
Private variables: x = 6, w = 26, k1 = 5, k = 5, t = 25

Test#30	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 Coin() function called. RETURN COIN returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 2, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 6, t = 0 Dispose()function called. SHUT DOWN returned value: 1

		Private variables: x = 6, w = 25, k1 = 0, k = 6, t = 0
Test#31	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 2, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 2, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 2, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0

Cancel() function called.
RETURN COINS

returned value: 1
Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0

InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 2, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 2, k = 5, t = 0

LargeCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 2, k = 5, t = 0

Coffee() function called.
DISPOSE LARGE CUP OF COFFEE
returned value: 1
Private variables: x = 1, w = 25, k1 = 1, k = 5, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 5, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 1, k = 5, t = 0

Sugar() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 5, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE
returned value: 1
Private variables: x = 1, w = 25, k1 = 1, k = 4, t = 0

Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 1, k = 4, t = 0

InsertLargeCups() function called.
returned value: 0

		Private variables: x = 2, w = 25, k1 = 1, k = 4, t = 0
		Coin() function called.
		RETURN COIN
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 1, k = 4, t = 0
		Cancel() function called.
		RETURN COINS
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 1, k = 4, t = 0
		Dispose()function called.
		SHUT DOWN
		returned value: 1
		Private variables: x = 6, w = 25, k1 = 1, k = 4, t = 0
Test#32	Valid	SetPrice() function called.
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0
		InsertLargeCups() function called.
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0
		Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0
		Cancel() function called.
		RETURN COINS
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0
		Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0
		LargeCup() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0
		Coffee() function called.
		DISPOSE LARGE CUP OF COFFEE
		returned value: 1
		Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0
		InsertLargeCups() function called.
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0

		InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 10, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 10, k = 0, t = 0
Test#33	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 4, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 9, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 9, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 9, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 9, t = 0 Coffee() function called.

DISPOSE SMALL CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 0, k = 8, t = 0

                InsertLargeCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 5, k = 8, t = 0

                Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 5, k = 8, t = 0

                Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 8, t = 0

                LargeCup() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 5, k = 8, t = 0

                Coffee() function called.
DISPOSE LARGE CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 8, t = 0

                SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 4, k = 8, t = 0

                Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 4, k = 8, t = 0

                Sugar() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 8, t = 0

                LargeCup() function called.
returned value: 1
Private variables: x = 3, w = 25, k1 = 4, k = 8, t = 0

                Coffee() function called.
DISPOSE LARGE CUP OF COFFEE WITH SUGAR
returned value: 1
Private variables: x = 1, w = 25, k1 = 3, k = 8, t = 0

                SetPrice() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 3, k = 8, t = 0

                Coin() function called.

		returned value: 1 Private variables: x = 2, w = 25, k1 = 3, k = 8, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 3, k = 8, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 3, k = 8, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 3, k = 8, t = 0
Test#34	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 5, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 26, k1 = 0, k = 5, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 26, k1 = 0, k = 5, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 25

		Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 0, k = 4, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 26, k1 = 0, k = 4, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 0, k = 4, t = 25 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 5, k = 4, t = 25 Coin() function called. returned value: 1 Private variables: x = 2, w = 26, k1 = 5, k = 4, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 26, k1 = 5, k = 4, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 26, k1 = 5, k = 4, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 1, w = 26, k1 = 4, k = 4, t = 0 Coin() function called. returned value: 1 Private variables: x = 1, w = 26, k1 = 4, k = 4, t = 25 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 26, k1 = 4, k = 4, t = 25
Test#35	Valid	InsertLargeCups() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0

		InsertSmallCups() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 SmallCup() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 LargeCup() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Sugar() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 SetPrice() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Cancel() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Coin() function called. returned value: 0 Private variables: x = 1, w = 0, k1 = 0, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 0, k1 = 0, k = 0, t = 0
Test#36	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 0

		Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0
		InsertSmallCups() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0
		SetPrice() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0
		Dispose()function called. 24) if (x == 1): 0 returned value: 0 Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0
		Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0
		InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0
		Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0
		SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0
		Coffee() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0
		Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0
		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 5, k = 0, t = 0
Test#37	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called.

		returned value: 1
		Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0
		
		        Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0
		
		        LargeCup() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0
		
		        Coffee() function called.
		returned value: 0
		Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0
		
		        Cancel() function called.
		RETURN COINS
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0
		
		        Dispose()function called.
		SHUT DOWN
		returned value: 1
		Private variables: x = 6, w = 25, k1 = 0, k = 5, t = 0

Test#38	Valid	SetPrice() function called.
		returned value: 1
		Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0
		
		        Coin() function called.
		returned value: 1
		Private variables: x = 2, w = 25, k1 = 0, k = 0, t = 0
		
		        Sugar() function called.
		returned value: 1
		Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0
		
		        Coffee() function called.
		returned value: 0
		Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0
		
		        InsertLargeCups() function called.
		returned value: 0
		Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0
		
		        InsertSmallCups() function called.
		returned value: 0
		Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0
		
		        SetPrice() function called.

		returned value: 0 Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0 Dispose()function called. returned value: 0 Private variables: x = 3, w = 25, k1 = 0, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 5, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 5, k = 0, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 5, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 3, w = 25, k1 = 5, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 5, k = 0, t = 0
Test#39	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0

		Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 5, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 5, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 5, t = 0 Coffee() function called. returned value: 0 Private variables: x = 3, w = 25, k1 = 0, k = 5, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 5, t = 0
Test#40	Valid	InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 1, k = 0, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Coffee() function called. DISPOSE LARGE CUP OF COFFEE returned value: 1 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0

		SmallCup() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 LargeCup() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 Sugar() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 SetPrice() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 Cancel() function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 Dispose()function called. returned value: 0 Private variables: x = 5, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 5, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 5, k = 0, t = 0
Test#41	Valid	InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 0, k = 1, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1

Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0

SmallCup() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0

Coffee() function called.
DISPOSE SMALL CUP OF COFFEE
returned value: 1
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

InsertLargeCups() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

SmallCup() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

LargeCup() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

Sugar() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

Coffee() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

InsertSmallCups() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

SetPrice() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

Cancel() function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

Dispose()function called.
returned value: 0
Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0

InsertSmallCups() function called.
returned value: 1
Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0

		Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 5, t = 0
Test#42	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 1, k = 0, t = 0
Test#43	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertLargeCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 1, k = 0, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0

		SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Coffee() function called. returned value: 0 Private variables: x = 3, w = 25, k1 = 1, k = 0, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 1, k = 0, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 1, k = 0, t = 0
Test#44	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. returned value: 0 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 1, t = 0
Test#45	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0

		InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 LargeCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. returned value: 0 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 Cancel() function called. RETURN COINS returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 1, t = 0
Test#46	Valid	SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Sugar() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 3, w = 25, k1 = 0, k = 1, t = 0

		Coffee() function called. DISPOSE SMALL CUP OF COFFEE WITH SUGAR returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 5, t = 0
Test#47	Valid	InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 0, k = 1, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0 Coin() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 SmallCup() function called. returned value: 1 Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0 Coffee() function called. DISPOSE SMALL CUP OF COFFEE returned value: 1 Private variables: x = 4, w = 25, k1 = 0, k = 0, t = 0 InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 5, t = 0 Dispose()function called. SHUT DOWN returned value: 1 Private variables: x = 6, w = 25, k1 = 0, k = 5, t = 0
Test#48	Valid	InsertSmallCups() function called. returned value: 1 Private variables: x = 1, w = 0, k1 = 0, k = 1, t = 0 SetPrice() function called. returned value: 1 Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0

| | | Coin() function called.
returned value: 1
Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0

Coffee() function called.
returned value: 0
Private variables: x = 2, w = 25, k1 = 0, k = 1, t = 0

Cancel() function called.
RETURN COINS
returned value: 1
Private variables: x = 1, w = 25, k1 = 0, k = 1, t = 0

Dispose()function called.
SHUT DOWN
returned value: 1
Private variables: x = 6, w = 25, k1 = 0, k = 1, t = 0 |

#6 List of Failed Tests

Test ID	Incorrect output	Expected output
No failed test cases.		