PROJECT

Software Testing and Analysis

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Problem 1:

1. Introduction

The objective of the project is to implement and test Gas Pump using the given EFSM model diagram. The following three testing oriented methods are to be used-

➢ Model Based Testing.(2-transition sequence testing)
➢ Default (Ghost) Transition Testing
➢ Multiple Condition Testing

We need to make use of the Test suite and verify the test case structure. Test results are verified and recorded in a report.

2-Transition Pair Testing:

States	Transition Pairs	Covered Test Cases
Idle	T1,T5	4
	T2,T5	2
	T3,T5	1
	T4,T5	5
	T9,T5	21
	T8,T5	18
	T6,T5	3
	T15,T5	29
	T14,T5	18
	T13,T5	30
	T12,T5	27
	T11,T5	15
	T10,T5	16
---	T1,T7	Not executable because price is not set.
	T2,T7	9
	T3,T7	10
	T4,T7	8
	T9,T7	22

	T8,T7	27
	T6,T7	11
	T15,T7	25
	T14,T7	19
	T13,T7	18
	T12,T7	16
	T11,T7	12
	T10,T7	8
---	T1,T2	1
	T2,T2	3
	T3,T2	7
	T4,T2	2
	T9,T2	19
	T8,T2	22
	T6,T2	6
	T15,T2	31
	T14,T2	32
	T13,T2	31
	T12,T2	10
	T11,T2	11
	T10,T2	12
---	T1,T3	5
	T2,T3	1
	T3,T3	5
	T4,T3	3
	T9,T3	20
	T8,T3	22
	T6,T3	7
	T15,T3	31
	T14,T3	25
	T13,T3	26
	T12,T3	9
	T11,T3	13
	T10,T3	28
---	T1,T4	2
	T2,T4	3

	T3,T4	5
	T4,T4	6
	T9,T4	21
	T8,T4	23
	T6,T4	8
	T15,T4	20
	T14,T4	26
	T13,T4	32
	T12,T4	12
	T11,T4	14
	T10,T4	11
---	T1,T6	Non-executable because price is not set
	T2,T6	7
	T3,T6	3
	T4,T6	6
	T9,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T9 is the previous state.
	T8,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T8 is the previous state.
	T6,T6	6
	T15,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously

		and T15 is the previous state.
	T14,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T14 is the previous state.
	T13,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T13 is the previous state.
	T12,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T12 is the previous state.
	T11,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T11 is the previous state.
	T10,T6	Not executable because coin[t+25] cannot be less than price as it has entered the state coins_inserted previously and T10 is the previous state.

Coins Inserted	T7,T11	NOT EXECUTABLE because the cup size has not been selected
	T7,T12	NOT EXECUTABLE because the cup size has not been selected
	T7,T20	9
	T7,T21	10
	T7,T22	8
	T7,T25	NOT EXECUTABLE because the cup size has not been selected
	T7,T24	NOT EXECUTABLE because the cup size has not been selected
	T7,T19	8
	T7,T10	8
----	T20,T11	12
	T20,T12	12
	T20,T20	9
	T20,T21	9
	T20,T22	13
	T20,T25	27
	T20,T24	27
	T20,T19	10
	T20,T10	16
----	T21,T11	11
	T21,T12	NOT EXECUTABLE because cup size chosen is small and T12 is executed when cup size is large.
	T21,T20	10
	T21,T21	10
	T21,T22	14
	T21,T25	19

	T21,T24	NOT EXECUTABLE because cup size chosen is small and T24 is executed when cup size is large.
	T21,T19	10
	T21,T10	16
----	T23,T11	27
	T23,T12	27
	T23,T20	13
	T23,T21	14
	T23,T22	24
	T23,T25	21
	T23,T24	28
	T23,T19	28
	T23,T10	28
----	T19,T11	NOT EXECUTABLE because cup size chosen is large and T11 is executed when cup size is small.
	T19,T12	9
	T19,T20	10
	T19,T21	11
	T19,T22	16
	T19,T25	NOT EXECUTABLE because cup size chosen is small and T25 is executed when cup size is large.
	T19,T24	22
	T19,T19	10
	T19,T10	8
Sugar	T16,T13	18
	T16,T14	19
	T16,T15	20

	T16,T16	17
	T16,T17	17
	T16,T18	18
	T16,T27	24
	T16,T26	24
	T16,T23	24
----	T17,T13	NOT EXECUTABLE because cup size chosen is small and T13 is executed when cup size is large.
	T17,T14	25
	T17,T15	25
	T17,T16	18
	T17,T17	17
	T17,T18	17
	T17,T27	21
	T17,T26	NOT EXECUTABLE because cup size chosen is small and T26 is executed when cup size is large.
	T17,T23	21
----	T18,T13	17
	T18,T14	18
	T18,T15	NOT EXECUTABLE because cup size chosen is large and T15 is executed when cup size is small.
	T18,T16	18
	T18,T17	25
	T18,T18	17
	T18,T27	NOT EXECUTABLE because cup size chosen is large and T27 is

		executed when cup size is small.
	T18,T26	17
	T18,T23	26
----	T22,T13	26
	T22,T14	26
	T22,T15	26
	T22,T16	17
	T22,T17	18
	T22,T18	18
	T22,T27	26
	T22,T26	26
	T22,T23	13
No large cups	T24,T8	22
	T26,T8	23
	T29,T8	17
	T24,T29	22
	T26,T29	17
	T29,T29	17
No small cups	T25,T9	20
	T27,T9	21
	T28,T9	19
	T25,T28	19
	T27,T28	22
	T28,T28	19

Test cases:

Test #	Transition	Test Case	RESULT
1	T1,T2,T3,T5	insert_large_cups(5), insert_small_cups(5), dispose()	PASS
2	T1,T4,T2,T5	set_price(25), insert_small_cups(5),dispose()	PASS

3	T1,T2,T2,T4,T3,T6,T5	insert_large_cups(5), insert_large_cups(5),set_price(50),insert_small _cups(5),coin(),dispose()	PASS
4	T1,T5	dispose()	PASS
5	T1,T3,T3,T4,T5	insert_small_cups(5), insert_small_cups(5),set_price(25),dispose()	PASS
6	T1,T4,T4,T6,T6,T2,T5	set_price(25),set_price(75), coin(),coin(),insert_large_cups(5),dispose()	PASS
7	T1,T4,T3,T2,T6,T3,T5	set_price(50),insert_small_cups(5),insert_large _cups(5), coin(),insert_small_cups(5),dispose()	PASS
8	T1,T2,T3,T4,T6,T4,T7,T10,T 7,T19,T10,T7,T22,T18,T13, T5	insert_large_cups(5),insert_small_cups(5), set_price(50),coin(), set_price(25),coin(),cancel(),coin(), large_cup(), cancel(),coin(),sugar(),large_cup(),tea(), dispose()	PASS
9	T1,T4,T2,T3,T7,T20,T20,T2 1,T19,T12,T3,T5	set_price(25), insert_large_cups(5),insert_small_cups(5), coin(),coin(),coin(),small_cup(), large_cup(),tea(),insert_small_cups(5), dispose()	PASS
10	T1,T4,T2,T3,T7,T21,T21,T1 9,T19,T21,T20,T19,T20,T1 9,T12,T2,T5	set_price(25), insert_large_cups(5), insert_small_cups(5) ,coin(),small_cup(),small_cup(), large_cup(),large_cup(), small_cup(),coin(), large_cup(),coin(),large_cup(),tea(), insert_large_cups(5),dispose()	PASS
11	T1,T2,T3,T4,T6,T7,T10,T4,T 6,T7,T19,T21,T11,T2,T5	insert_large_cups(5), insert_small_cups(5),set_price(50),coin(), coin(),cancel(),set_price(25),coin() ,coin(),large_cup(),small_cup(), tea(),insert_large_cups(5),dispose()	PASS
12	T1,T2,T3,T4,T7,T21,T20,T1 1,T7,T19,T20,T12,T4,T7,T1 0,T2,T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(), small_cup(),coin(), tea(), coin(),large_cup(),coin(),tea(), set_price(25),coin(),cancel(), insert_large_cups(5),dispose()	PASS
13	T1,T2,T3,T4,T7,T20,T22,T2 3,T20,T21,T11,T3,T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(), coin(),sugar(),sugar(),coin(),	PASS

		small_cup(), tea(), insert_small_cups(5), dispose()	
14	T1,T2,T3,T4,T7,T21,T22,T23,T21,T11,T4,T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(), small_cup(),sugar(),sugar(), small_cup(), tea(),set_price(30),dispose()	PASS
15	T1,T2,T3,T4,T7, T19,T22,T23,T19,T21,T11, T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(), large_cup(),sugar(),sugar(), large_cup(), small_cup(),tea(),dispose()	PASS
16	T1,T2,T3,T4,T7, T20,T10,T3,T7,T19,T22,T23, T19,T12,T7,T21,T10,T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(),coin(),cancel(), insert_small_cups(5), coin(), large_cup(),sugar(), sugar(),large_cup(), tea(), coin(), small_cup(),cancel(),dispose()	PASS
17	T1,T2,T3,T4,T7,T20, T22,T16,T16, T17, T17,T18,T18,T13, T7,T22,T18,T26,T29,T29, T8,T5	insert_large_cups(2), insert_small_cups(2),set_price(25), coin(), coin(),sugar(),coin(),coin(), small_cup(), small_cup(),large_cup(),large_cup(), tea(),coin(),sugar(),large_cup(), tea(), coin(),coin(),insert_large_cups(5),dispose()	PASS
18	T1,T2,T3,T4,T7, T21,T22,T17,T16, T18,T16,T13,T7,T19, T22,T18,T14,T5	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(), small_cup(),sugar(),small_cup(), coin(),large_cup(),coin(),tea(),coin(),large_cup() ,sugar(),large_cup(),cancel(),dispose()	PASS
19	T1,T2,T3,T4,T7, T22, T17,T16,T14, T7,T21,T25,T28,T28,T9,T2, T5	insert_large_cups(1), insert_small_cups(1),set_price(25), coin(),sugar(),small_cup(),coin(),cancel, coin(),small_cup(), tea(), coin(),coin(),insert_small_cups(5), insert_large_cups(5),dispose()	PASS
20	T1,T2,T3,T4,T7, T22, T17,T16,T15,T4,T7,T25 ,T9,T3,T5,	insert_large_cups(2), insert_small_cups(2),set_price(25), coin(), sugar(), small_cup(),coin(),tea(), set_price(25),coin(),small_cup(), tea(), insert_small_cups(5), insert_small_cups(5), dispose()	PASS

21	T1,T3,T4,T7,T22,T17,T27,T9,T4, T7,T22,T17,T23,T25,T9,T5	insert_small_cups(1),set_price(25), coin(),sugar(),small_cup(),tea(),insert_small_cups(1),set_price(25),coin(), sugar(), small_cup(),sugar(),tea(),insert_small_cups(5), dispose()	PASS
22	T1,T2,T3,T4,T7,T22,T17,T27,T28, T9,T7,T19,T24,T29,T29,T8, T3,T7,T19,T24,T8, T2, T5	insert_large_cups(1), insert_small_cups(1),set_price(25), coin(),sugar(),small_cup(),tea(),coin(),insert_small_cups(5), coin(),large_cup(),tea(),coin(), coin(),insert_large_cups(1), insert_small_cups(5),coin(), large_cup(),tea(),insert_large_cups(4), insert_large_cups(5),dispose()	PASS
23	T1,T2,T4,T7,T22,T18,T26,T8,T4,T5	insert_large_cups(1), set_price(25), coin(), sugar(), large_cup(), tea(), insert_large_cups(5), set_price(50), dispose()	PASS
24	T1,T2,T3,T4,T6,T7,T22,T17,T16, T27, T9, T7,T22,T18,T16,T23,T22,T16,T26,T8,T5	insert_large_cups(1), insert_small_cups(1),set_price(50),coin(), coin(), sugar(), small_cup(), coin(), tea(), insert_small_cups(1),coin(),sugar(), large_cup(), coin(),sugar(),sugar(),coin(),tea(), insert_large_cups(5),dispose()	PASS
25	T1,T2,T3,T4,T6,T7, T22,T18,T17,T14,T3 ,T7,T19,T22,T17,T15,T7,T20, T22,T17, T27,T9,T4,T5	insert_large_cups(1), insert_small_cups(1),set_price(25),coin(),sugar(),large_cup(),small_cup(),cancel(), insert_small_cups(1), coin(),large_cup(),sugar(),small_cup(),tea(), coin(),coin(),sugar(),small_cup(),tea(), insert_small_cups(2),set_price(50),dispose()	PASS
26	T1,T2,T3,T4,T6,T7,T22, T18, T23,T22,T13,T3,T7,T22,T14,T4,T7, T21,T22,T15,T7,T21,T22,T27,T9, T3,T7,T19,T22,T26,T8,T5	insert_large_cups(2), insert_small_cups(1),set_price(25),coin(), Sugar(), large_cup(),sugar(),sugar(),tea(), insert_small_cups(1),coin(), sugar(),cancel(),set_price(25), coin(), small_cup(),sugar(),tea(), coin(), small_cup(),sugar(),tea(),insert_small_cups(2), insert_small_cups(2),coin(), large_cup(),sugar(),tea(),insert_large_cups(5), dispose()	PASS
27	T1,T2,T3,T4,T6,T7, T21,T20,T25,	insert_large_cups(1), insert_small_cups(1),set_price(25),coin(), small_cup(),coin(),tea(),insert_small_cups(5),co	PASS

	T9,T7,T19,T20,T24,T8,T7,T22,T17, T23,T11,T7,T22,T18,T23,T12,T5	in(),large_cup(),coin(),tea(), insert_large_cups(5), coin(), sugar(), small_cup(), sugar(), tea(), coin(), sugar(),large_cup(), sugar(), tea(),dispose()	
28	T1,T2,T3,T4,T6,T7, T22,T18,T23, T24, T8, T7, T22, T23, T19, T12, T7, T22,T17,T23,T10,T3,T5	insert_large_cups(1), insert_small_cups(1),set_price(25),coin(), sugar(), large_cup(), sugar(), tea(), insert_large_cups(5), coin(),sugar(),sugar(), large_cup(), tea(),coin(),sugar(), small_cup(), sugar(), cancel(), insert_small_cups(5), dispose()	PASS
29	T1,T2,T3,T4,T6,T7,T22, T17, T15, T5	insert_large_cups(5), insert_small_cups(5),set_price(25),coin(), sugar(), small_cup(), tea(), dispose()	PASS
30	T1,T2,T3,T4,T6,T7,T22, T18,T13,T5	insert_large_cups(5), insert_small_cups(5),set_price(25),coin(), sugar(), large_cup(), tea(), dispose()	PASS
31	T1,T2,T3,T4,T6,T7,T22,T17, T15, T2, T7,T22,T17,T15,T3,T7, T22, T18, T13, T2, T5,	insert_large_cups(5), insert_small_cups(5),set_price(25),coin(), sugar(), small_cup(), tea(), insert_large_cups(5), coin(), sugar(), small_cup(), tea(), insert_small_cups(2), coin(), sugar(), large_cup(), tea(), insert_large_cups(5), dispose()	PASS
32	T1,T2,T3,T4,T6,T7,T22,T17, T14, T2, T7, T22, T18, T13, T4, T5	insert_large_cups(5), insert_small_cups(5),set_price(25),coin(), sugar(), small_cup(), cancel(), insert_large_cups(5), coin(), sugar(), large_cup(), tea(), set_price(25), dispose()	PASS

Ghost Transition Testing:

Test #	state	Ghost transitions identified	Test cases
51	idle	Insert_large_cups(n)[n<=0] Insert_small_cups(n)[n<=0] Set_price(p)[p<=0] Small_cup() Large_cup() Tea()	Vending_machine(), insert_large_cups(0), insert_small_cups(0), set_price(0), small_cup(), large_cup(), tea(), sugar(), cancel(), dispose()

		Sugar(), Cancel()	
52	Coins inserted	Insert_large_cups(n)[n>0] Insert_small_cups(n)[n>0] Set_price(p)[p>0] Tea()[(k<1)||(s!=1)] Tea()[(k1<1)||(s!=2)] Dispose()	Vending_machine(), insert_large_cups(5), set_price(25),coin(), insert_large_cups(5), insert_small_cups(5), set_price(50), tea(), tea(),dispose(), cancel(), dispose()
53	sugar	insert_small_cups(n)[n>0], insert_large_cups(n)[n>0], set_price(p)[p>0], Tea()[(k<1)||(s!=1)] Tea()[(k1<1)||(s!=2)] Dispose()	Vending_machine(), insert_large_cups(5), set_price(25),coin(), insert_small_cups(5), insert_large_cups(5), set_price(25), tea(), tea(), dispose(), sugar(),cancel(), dispose()
54	No small cups	insert_large_cups(n)[n>0], set_price(p)[p>0], tea()[k1!=1||s!=2], insert_small_cups(n)[n<=0], small_cup() large_cup() sugar() cancel(), dispose(),	Vending_machine(), insert_large_cups(5), insert_small_cups(1),set_price(25), coin(), small_cup(), tea(), sugar(), insert_large_cups(5), set_price(25), tea(), insert_small_cups(0), Small_cup(), large_cup(), cancel(), dispose(), insert_small_cups(5), dispose()
55	No large cups	insert_small_cups(n)[n>0], set_price(p)[p>0], tea()[k!=1||s!=1], insert_large_cups(n)[n<=0], small_cup() large_cup() sugar() cancel(), dispose(),	Vending_machine(), insert_large_cups(1), insert_small_cups(5),set_price(25), coin(), large_cup(), tea(), sugar(), insert_small_cups(5), set_price(0), coin(), tea(), tea(),insert_large_cups(0), Small_cup(), large_cup(), cancel(), dispose(), insert_large_cups(5), dispose()

Multiple Conditioning Testing:

Coin():

`(x == 1):`

X==1	TEST CASE COVERED
T	26
F	18

`(t + 25 >= price) && (price > 0)`

t+25 >= price	Price > 0	Test case covered	justification
T	T	26	
T	F	40	
F	T	7	
F	F	IMPOSSIBLE	If price = 0 then t+25 cannot be less than 0. Although price<=0 is true. Price cannot be negative as constructor sets it to 0

`(t + 25 < price)`

T+25 < price	Test cases covered
T	24
F	40

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

x>1	X<6	Test case covered	justification
T	T	18	
T	F	33	

F	T	IMPOSSIBLE	Minimum value for x is 1. If x==1 then this code will not be reached. It will executed in the one of the previous conditions
F	F	IMPOSSIBLE	X cannot be negative and greater than or equal to 6 at the same time.

`Small_cup():` `(x == 2) || (x == 3)`

x==2	x==3	Test case covered	justification
T	T	IMPOSSIBLE	X cannot be set to two values at the same time.
T	F	26	
F	T	18	
F	F	40	

`Large_cup() :` `(x == 2) || (x == 3)`

x==2	x==3	Test case covered	justification
T	T	IMPOSSIBLE	X cannot be set to two values at the same time.
T	F	15	
F	T	26	
F	F	40	

Sugar():

```
if ((x == 2) || (x == 3))
```

x==2	x==3	Test case covered	justification
T	T	IMPOSSIBLE	X cannot be set to two values at the same time.
T	F	T6	
F	T	26	
F	F	40	

```
if (x == 2)
```

X==2	Test cases covered
T	26
F	26

```
Tea(): (x == 2) || (x == 3)
```

x==2	x==3	Test case covered	justification
T	T	IMPOSSIBLE	X cannot be set to two values at the same time.
T	F	26	
F	T	26	
F	F	40	

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

x==2	K1>1	S==2	Test case covered
T	T	T	36
T	T	F	33
T	F	T	34
T	F	F	35
F	T	T	26,36
F	T	F	26
F	F	T	26
F	F	F	37

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

x==2	K>1	S==1	Test case covered
T	T	T	33
T	T	F	33
T	F	T	35
T	F	F	34
F	T	T	26-
F	T	F	36
F	F	T	26
F	F	F	26

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

x==2	K==1	S==1	Test case covered
T	T	T	35
T	T	F	34
T	F	T	41
T	F	F	33
F	T	T	26
F	T	F	26
F	F	T	26
F	F	F	36

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

x==2	K1==1	S==2	Test case covered
T	T	T	T34, T33
T	T	F	41
T	F	T	42
T	F	F	41
F	T	T	26
F	T	F	26

F	F	T	36
F	F	F	26

`(x == 3) && (k1 == 1) && (s == 2)`

x==3	K1==1	S==2	Test case covered	justification
T	T	T	26	
T	T	F	26, 37	
T	F	T	26, 18	
T	F	F	26	
F	T	T	impossible	This tends to condition where x =2, k1=1 and s=2 which will get executed previously.
F	T	F	43	
F	F	T	42	
F	F	F	41	

`(x == 3) && (k == 1) && (s == 1)`

x==3	K==1	S==1	Test case covered	justification
T	T	T	26	
T	T	F	34	
T	F	T	26	
T	F	F	36	
F	T	T	impossible	This tends to condition where x =2, k=1 and s=1 which will get

				executed previously.
F	T	F	44	
F	F	T	41	
F	F	F	41	

```
(x == 3) && (k1 > 1) && (s == 2)
```

x==3	K1>1	S==2	Test case covered	justification
T	T	T	26, 36, 34	
T	T	F	18	
T	F	T	45	
T	F	F	26	
F	T	T	impossible	This tends to condition where x =2, k1>1 and s=2 which will get executed previously.
F	T	F	46	
F	F	T	41	
F	F	F	41	

```
(x == 3) && (k > 1) && (s == 1)
```

x==3	K>1	S==1	Test case covered	justification
T	T	T	26, 37	
T	T	F	45	
T	F	T	45	
T	F	F	45	

F	T	T	IMPOSSIBLE	This tends to condition where x =2, k>1 and s=1 which will get executed in one of the previous conditions
F	T	F	42	
F	F	T	41	
F	F	F	41	

Insert_large_cups(n):

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

x==1	n>0	Test case covered
T	T	7
T	F	47
F	T	26
F	F	47

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

x==5	n>0	Test case covered
T	T	26
T	F	48
F	T	47
F	F	47

Insert_small_cups(n):

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

x==1	n>0	Test case covered
T	T	7
T	F	47

F	T	26
F	F	47

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

x==4	n>0	Test case covered
T	T	26
T	F	49
F	T	47
F	F	47

Set_price(p):

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

x==1	p>0	Test case covered
T	T	7
T	F	50
F	T	50
F	F	50

Cancel():

`(x == 2) || (x == 3)`

x==2	x==3	Test case covered	justification
T	T	IMPOSSIBLE	X cannot be assigned two values at the same time.
T	F	26	
F	T	18	
F	F	50	

Dispose():

```
(x == 1)
```

X==1	Test case covered
T	7
F	39

Test cases not covered previously:

Test #	Test case	RESULT
33	insert_large_cups(5), insert_small_cups(1),set_price(25), coin(), large_cup(), tea(), coin(), small_cup(), tea(), insert_small_cups(5), dispose(),coin(), dispose()	FAIL(the program returns 0 when the coin is inserted after 0. It doesn't perform any operation and program returns 0)
34	insert_large_cups(1), insert_small_cups(1),set_price(25), coin(), small_cup(), tea(), insert_small_cups(5), coin(), sugar(), small_cup(), tea(), dispose()	pass
35	insert_large_cups(1), insert_small_cups(1),set_price(25), coin(), large_cup(), tea(), insert_large_cups(2), dispose()	pass
36	insert_large_cups(5), insert_small_cups(5),set_price(25), coin(),sugar(), small_cup(), tea(),coin(),small_cup(), tea(), dispose()	pass
37	insert_large_cups(5), insert_small_cups(1),set_price(25), coin(),sugar(), large_cup(), tea(), dispose()	pass
38	insert_large_cups(5), set_price(25), coin(), sugar(), small_cup(), tea(), dispose()	FAIL(the program returns 0 when the small cup of tea is invoked when there are no small cups

		inserted. It doesn't perform any operation and program returns 0)
39	insert_large_cups(5), insert_small_cups(1),set_price(25), coin(), sugar(), dispose()	FAIL(the program returns 0 when dispose is called when x=3. It doesn't perform any operation and program returns 0)
40	coin(), dispose(), set_price(75), coin(), small_cup(), large_cup(), dispose(), sugar(), dispose(), tea(), dispose()	FAIL(the program returns 0 when the coin is inserted with price=0. It doesn't perform any operation and program returns 0)
41	set_price(25), coin(), large_cup(), tea(), coin(), small_cup(), tea(), insert_small_cups(1), coin(), large_cup(), tea(), dispose()	FAIL(the program returns 0 when large cup tea is invoked without inserted any cups. It doesn't perform any operation and program returns 0)
42	insert_large_cups(5), coin(), small_cup(), tea(),dispose()	FAIL(the program returns 0 when the price is not greater than 0 and we call coin. It doesn't perform any operation and program returns 0)
43	insert_small_cups(1), set_price(25),coin(), tea(), dispose()	FAIL(the program returns 0 when tea is called without choosing a cup size. It doesn't perform any operation and program returns 0)

44	insert_large_cups(1), set_price(25), coin(), small_cup(), tea(), dispose()	FAIL(the program returns 0 when small_cup is called when there are no small cups. It doesn't perform any operation and program returns 0)
45	set_price(25), coin(), sugar(), small_cup(),tea(), coin(), sugar(), large_cup(), tea(), insert_large_cups(5), coin(), sugar(), small_cup(), tea(), dispose()	FAIL(the program returns 0 when large cup when there are no large cup/s . It doesn't perform any operation and program returns 0)
46	insert_small_cups(5), set_price(25), coin(), tea(), dispose()	FAIL(the tea returns 0 when we call tea without choosing any cup. It doesn't perform any operation and program returns 0)
47	insert_large_cups(0), set_price(25), coin(), insert_large_cups(0), insert_large_cups(5), cancel(), insert_small_cups(0), set_price(25), coin(), insert_small_cups(0), insert_large_cups(5), dispose()	FAIL(the program returns 0 when there are no cups. It doesn't perform any operation and program returns 0)
48	set_price(25), insert_large_cups(1), coin(), large_cup(), tea(), insert_large_cups(0) , dispose()	FAIL(the program returns 0 when the insert_large_cups is set to 0. It doesn't perform any operation and program returns 0)
49	set_price(25), insert_small_cups(1), coin(), small_cup(), tea(), insert_small_cups(0) , dispose()	FAIL(the program returns 0 when the insert_small_cups is passed with n<=0. It doesn't perform any

		operation and program returns 0)
50	set_price(0), set_price(25), coin(), set_price(25), set_price(0), cancel(),dispose(), cancel(), dispose()	FAIL(the program returns 0 when price is set to 0. The program does not perform any operation)

Source Code:

test_driver.java

```java
import java.util.Scanner;

public class test_driver {
public static void main(String[] args) {
      int x = 0;
      vending_machine vm = new vending_machine();
      Scanner scanner = new Scanner(System.in);
      while(true){
      System.out.println("select the method you want to call:");
      System.out.println("1.coin()\n2.small_cup\n3.large_cup()\n4.sugar()\n5.
tea()\n6.insert_large_cups()"
                 +
"\n7.insert_small_cups()\n8.set_price()\n9.cancel()\n10.dispose()\n");
      System.out.println("Other options:\n11. show_variables()\n12. quit\n");
    int number = scanner.nextInt();

      switch(number){
      case 1: x = vm.coin();
              System.out.println(x);
              break;
      case 2: x = vm.small_cup();
              System.out.println(x);
              break;
      case 3: x = vm.large_cup();
              System.out.println(x);
              break;
      case 4: x = vm.sugar();
              System.out.println(x);
              break;
      case 5: x = vm.tea();
              System.out.println(x);
              break;
      case 6: System.out.println("Enter the number of large cups to be
inserted:\n");
              int n = scanner.nextInt();
                x = vm.insert_large_cups(n);
                System.out.println(x);
                break;
```

```java
        case 7: System.out.println("Enter the number of small cups to be
inserted:\n");
                int n1 = scanner.nextInt();
                x = vm.insert_small_cups(n1);
                System.out.println(x);
                break;
        case 8: System.out.println("Enter the price to be set for tea:\n");
                int n2 = scanner.nextInt();
                x = vm.set_price(n2);
                System.out.println(x);
                break;
        case 9: x = vm.cancel();
                System.out.println(x);
                break;
        case 10: x = vm.dispose();
                 System.out.println(x);
                 break;
        case 11: show_variables(vm);
                 break;
        case 12: System.exit(0);
        default: System.out.println("invalid condition");
                 break;
        }
    }
}

private static void show_variables(vending_machine vm) {
        int price = vm.getpvalue();
        int k = vm.getkvalue();
        int k1 = vm.getk1value();
        int t = vm.gettvalue();
        int s = vm.getsvalue();
        System.out.println("price: "+price+" k: "+k+" k1: "+k1+" s: "+s+" t:
"+t);
        // TODO Auto-generated method stub

}
}
```

vending_machine.java

```java
public class vending_machine
{
        private int x;
        private int price;
        private int k;
        private int k1;
        private int t;
        private int s;

        public vending_machine()
        {
                k1 = 0;
                k = 0;
                t = 0;
```

```java
        price = 0;
        x = 1;
}
public final int coin()
{
        if (x == 1)
        {
                if ((t + 25 >= price) && (price > 0))
                {
                        s = 0;
                        t = 0;
                        x = 2;
                        return 1;
                }
                else if (t + 25 < price)
                {
                        t = t + 25;
                        return 1;
                }
        }
        else if ((x > 1) && (x < 6))
        {
                System.out.print("RETURN COIN");
                System.out.print("\n");
                return 1;
        }
        return 0;
}
public final int small_cup()
{
        if ((x == 2) || (x == 3))
        {
                s = 2;
                return 1;
        }
        return 0;
}
public final int large_cup()
{
        if ((x == 2) || (x == 3))
        {
                s = 1;
                return 1;
        }
        return 0;
}
public final int sugar()
{
        if ((x == 2) || (x == 3))
        {
                if (x == 2)
                {
                        x = 3;
                }
                else
                {
                        x = 2;
```

```java
			}
			return 1;
		}
		return 0;
	}
	public final int tea()
	{
		if ((x == 2) || (x == 3))
		{
			if ((x == 2) && (k1 > 1) && (s == 2))
			{
				System.out.print("DISPOSE SMALL CUP OF TEA");
				System.out.print("\n");
				k1 = k1 - 1;
				x = 1;
				return 1;
			}
			else if ((x == 2) && (k > 1) && (s == 1))
			{
				System.out.print("DISPOSE LARGE CUP OF TEA");
				System.out.print("\n");
				k = k - 1;
				x = 1;
				return 1;
			}
			else if ((x == 2) && (k == 1) && (s == 1))
			{
				System.out.print("DISPOSE LARGE CUP OF TEA");
				System.out.print("\n");
				k = k - 1;
				x = 5;
				return 1;
			}
			else if ((x == 2) && (k1 == 1) && (s == 2))
			{
				System.out.print("DISPOSE SMALL CUP OF TEA");
				System.out.print("\n");
				k1 = k1 - 1;
				x = 4;
				return 1;
			}
			else if ((x == 3) && (k1 == 1) && (s == 2))
			{
				System.out.print("DISPOSE SMALL CUP OF TEA WITH
SUGAR");
				System.out.print("\n");
				k1 = k1 - 1;
				x = 4;
				return 1;
			}
			else if ((x == 3) && (k == 1) && (s == 1))
			{
				System.out.print("DISPOSE LARGE CUP OF TEA WITH
SUGAR");
				System.out.print("\n");
				k = k - 1;
				x = 5;
```

```java
                                return 1;
                        }
                        if ((x == 3) && (k1 > 1) && (s == 2))
                        {
                                System.out.print("DISPOSE SMALL CUP OF TEA WITH
SUGAR");
                                System.out.print("\n");
                                k1 = k1 - 1;
                                x = 1;
                                return 1;
                        }
                        else if ((x == 3) && (k > 1) && (s == 1))
                        {
                                System.out.print("DISPOSE LARGE CUP OF TEA WITH
SUGAR");
                                System.out.print("\n");
                                k = k - 1;
                                x = 1;
                                return 1;
                        }
                        return 0;
                }
                return 0;
        }
        public final int insert_large_cups(int n)
        {
                if ((x == 1) && (n > 0))
                {
                        k = k + n;
                        return 1;
                }
                else if ((x == 5) && (n > 0))
                {
                        k = n;
                        x = 1;
                        return 1;
                }
                return 0;
        }
        public final int insert_small_cups(int n)
        {
                if ((x == 1) && (n > 0))
                {
                        k1 = k1 + n;
                        return 1;
                }
                else if ((x == 4) && (n > 0))
                {
                        k1 = n;
                        x = 1;
                        return 1;
                }
                return 0;
        }
        public final int set_price(int p)
        {
                if ((x == 1) && (p > 0))
```

```java
            {
                    price = p;
                    return 1;
            }
            return 0;
    }
    public final int cancel()
    {
            if ((x == 2) || (x == 3))
            {
                    System.out.print("RETURN COINS");
                    System.out.print("\n");
                    x = 1;
                    return 1;
            }
            return 0;
    }
    public final int dispose()
    {
            if ((x == 1))
            {
                    System.out.print("SHUT DOWN");
                    System.out.print("\n");
                    x = 6;
                    return 1;
            }
            return 0;
    }
    public int getpvalue(){
            return price;
    }
    public int getkvalue(){
            return k;
    }
    public int getk1value(){
            return k1;
    }
    public int gettvalue(){
            return t;
    }
    public int getsvalue(){
            return s;
    }
}
```

TEST CASE EXECUTION:

Test#1:

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()

4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 0 k: 5 k1: 5 s: 0 t: 0

Test#2:
8
Enter the price to be set for tea:
25
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11

price: 25 k: 0 k1: 5 s: 0 t: 0

Test#3:
6
Enter the number of large cups to be inserted:
5
1

8
Enter the price to be set for tea:

50
1

7
Enter the number of small cups to be inserted:
5
1

1
1

10
SHUT DOWN
1

Test#4:
10
SHUT DOWN
1

Test#5:
7
Enter the number of small cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:

25
1

10
SHUT DOWN
1

11
price: 25 k: 0 k1: 10 s: 0 t: 0

Test#6:
8
Enter the price to be set for tea:
25
1

8
Enter the price to be set for tea:
75
1

1
1

1
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 75 k: 5 k1: 0 s: 0 t: 50

Test#7:
8
Enter the price to be set for tea:
50

1

7
Enter the number of small cups to be inserted:
5
1

6
Enter the number of large cups to be inserted:
5
1

1
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 50 k: 5 k1: 10 s: 0 t: 25

Test#8:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
50
1

1

1

8
Enter the price to be set for tea:
25
1

1
1

9
RETURN COINS
1

1
1

3
1

9
RETURN COINS
1

1
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

10
SHUT DOWN
1

11

price: 25 k: 4 k1: 5 s: 1 t: 0

Test#9:
8
Enter the price to be set for tea:
25
1

6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

1
1

1
RETURN COIN
1

1
RETURN COIN
1

2
1

3
1

5
DISPOSE LARGE CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 10 s: 1 t: 0

Test#10:
8
Enter the price to be set for tea:

25
1

6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

1
1

2
1

2
1

3
1

3
1

2
1

1
RETURN COIN

1

3
1

1
RETURN COIN
1

3
1
5
DISPOSE LARGE CUP OF TEA
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 9 k1: 5 s: 1 t: 0

Test#11:

6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
50
1

1
1

1
1

9
RETURN COINS
1

8
Enter the price to be set for tea:
25
1

1
1

1
RETURN COIN
1

3
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 10 k1: 4 s: 2 t: 0

Test#12:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

2
1

1
RETURN COIN
1

5
DISPOSE SMALL CUP OF TEA
1

1
1

3
1

1
RETURN COIN
1

5
DISPOSE LARGE CUP OF TEA
1

8
Enter the price to be set for tea:
25
1

1
1

9
RETURN COINS
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 9 k1: 4 s: 0 t: 0

Test#13:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

1

RETURN COIN
1

4
1

4
1

1
RETURN COIN
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 5 k1: 9 s: 2 t: 0

Test#14:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:

5
1

8
Enter the price to be set for tea:
25
1

1
1

2
1

4
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

8
Enter the price to be set for tea:
30
1

10
SHUT DOWN
1

11
price: 30 k: 5 k1: 4 s: 2 t: 0

Test#15:

6
Enter the number of large cups to be inserted:
5
1

7

Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

3
1

4
1

4
1

3
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

10
SHUT DOWN
1

11
price: 25 k: 5 k1: 4 s: 2 t: 0

Test#16:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

1
RETURN COIN
1

9
RETURN COINS
1

7
Enter the number of small cups to be inserted:
5
1

1
1

3
1

4
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA
1

1
1

2
1

9
RETURN COINS
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 10 s: 2 t: 0

Test#17:
6
Enter the number of large cups to be inserted:
2
1

7
Enter the number of small cups to be inserted:
2
1

8
Enter the price to be set for tea:
25
1

1
1

1
RETURN COIN
1

4
1

1
RETURN COIN
1

1
RETURN COIN
1

2
1

2
1

3
1

3
1
5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

1
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

1
RETURN COIN
1

1
RETURN COIN
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 5 k1: 2 s: 1 t: 0
Test#18:
6
Enter the number of large cups to be inserted:

5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

2
1

4
1

2
1

1
RETURN COIN
1

3
1

1
RETURN COIN
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

1
1

3
1

4
1

3
1

9
RETURN COINS
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 5 s: 1 t: 0

Test#19:
6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

1
RETURN COIN
1

9
RETURN COINS
1

1
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

1
RETURN COIN
1

1
RETURN COIN
1

7
Enter the number of small cups to be inserted:
5

1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 6 k1: 5 s: 2 t: 0

Test#20:
6
Enter the number of large cups to be inserted:

2
1
select the method you want to call:

7
Enter the number of small cups to be inserted:
2
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

1
RETURN COIN
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

8
Enter the price to be set for tea:

25
1

1
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 2 k1: 10 s: 2 t: 0

Test#21:
7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

4
1

5
DISPOSE SMALL CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 0 k1: 5 s: 2 t: 0
Test#22:

6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

1
RETURN COIN
1

7
Enter the number of small cups to be inserted:
5
1

1
1

3
1

5
DISPOSE LARGE CUP OF TEA
1
select the method you want to call:

1
RETURN COIN
1

1
RETURN COIN
1

6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:
5
1

1
1

3
1

5
DISPOSE LARGE CUP OF TEA
1

6
Enter the number of large cups to be inserted:
4
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 9 k1: 10 s: 1 t: 0

Test#23:
6
Enter the number of large cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

6
Enter the number of large cups to be inserted:
5

1

8
Enter the price to be set for tea:

50
1

10
SHUT DOWN
1

11
price: 50 k: 5 k1: 0 s: 1 t: 0

Test#24:

6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
50
1

1
1

1
1

4
1

2
1

1
RETURN COIN
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

7
Enter the number of small cups to be inserted:
1
1

1
1

1
1

4
1

3
1

1
RETURN COIN
1

4
1

4
1

1
RETURN COIN
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

6

Enter the number of large cups to be inserted:

5

1

10

SHUT DOWN

1

11

price: 50 k: 5 k1: 1 s: 1 t: 0

Test#25:

6

Enter the number of large cups to be inserted:

1

1

7

Enter the number of small cups to be inserted:

1

1

8

Enter the price to be set for tea:

25

1

1

1

4

1

3

1

2

1

9

RETURN COINS

1

7

Enter the number of small cups to be inserted:
1
1

1
1

3
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

1
1

1
RETURN COIN
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

7
Enter the number of small cups to be inserted:
2
1

8
Enter the price to be set for tea:

50
1

10
SHUT DOWN
1

11
price: 50 k: 1 k1: 2 s: 2 t: 0

Test#26:

6
Enter the number of large cups to be inserted:
2
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:

25
1

1
1

4
1

3
1

4
1

4
1

5

DISPOSE LARGE CUP OF TEA WITH SUGAR

1

7

Enter the number of small cups to be inserted:

1

1

1

1

4

1

9

RETURN COINS

1

8

Enter the price to be set for tea:

25

1

1

1

2

1

4

1

5

DISPOSE SMALL CUP OF TEA WITH SUGAR

1

1

1

2

1

4

1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

7
Enter the number of small cups to be inserted:
2
1

7
Enter the number of small cups to be inserted:
2
1

1
1

3
1

4
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 5 k1: 4 s: 1 t: 0

Test#27:
6
Enter the number of large cups to be inserted:

1
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

2
1

1
RETURN COIN
1

5
DISPOSE SMALL CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

1
1

3
1

1
RETURN COIN
1

5

DISPOSE LARGE CUP OF TEA
1

6
Enter the number of large cups to be inserted:

5
1

1
1

4
1

2
1

4
1

5
DISPOSE SMALL CUP OF TEA
1

1
1

4
1

3
1

4
1

5
DISPOSE LARGE CUP OF TEA
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 4 s: 1 t: 0

Test#28:
6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

3
1

4
1

5
DISPOSE LARGE CUP OF TEA
1

6
Enter the number of large cups to be inserted:
5
1

1
1

4
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA
1

1
1

4
1

2
1

4
1

9
RETURN COINS
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 6 s: 2 t: 0

Test#29:
6
Enter the number of large cups to be inserted:

5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

10
SHUT DOWN
1

11
price: 25 k: 5 k1: 4 s: 2 t: 0

Test#30:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1
4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

10
SHUT DOWN
1

11
price: 25 k: 4 k1: 5 s: 1 t: 0

Test#31:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

4

1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

6
Enter the number of large cups to be inserted:
5
1

1
1

4
1

2
1

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1

7
Enter the number of small cups to be inserted:
2
1

1
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

11
price: 25 k: 14 k1: 5 s: 1 t: 0

Test#32:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
5
1

8
Enter the price to be set for tea:
25
1

1
1

4
1

2
1

9
RETURN COINS
1

6
Enter the number of large cups to be inserted:

5
1

1
1

4
1

3
1

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1

8
Enter the price to be set for tea:
25
1

10
SHUT DOWN
1

11
price: 25 k: 9 k1: 5 s: 1 t: 0

Test#33:
6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

3
1

5
DISPOSE LARGE CUP OF TEA
1

1
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

1
0

10
0

11
price: 25 k: 4 k1: 5 s: 2 t: 0

Test#34:
6
Enter the number of large cups to be inserted:

1
1

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()

2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()

10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE SMALL CUP OF TEA
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()

12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()

4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()

10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 1 k1: 4 s: 2 t: 0

Test#35:

6
Enter the number of large cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE LARGE CUP OF TEA
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 2 k1: 1 s: 1 t: 0

Test#36:
6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()

8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE SMALL CUP OF TEA WITH SUGAR
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE SMALL CUP OF TEA
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()

4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 5 k1: 3 s: 2 t: 0

Test#37:
6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()

4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()

6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()

12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE LARGE CUP OF TEA WITH SUGAR
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()

2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 4 k1: 1 s: 1 t: 0

Test#38:
6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()

8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 5 k1: 0 s: 2 t: 0

Test#39:

6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7

Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:

1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()

9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 25 k: 5 k1: 1 s: 0 t: 0

Test#40:
1
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

75
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2

0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

11
price: 0 k: 0 k1: 0 s: 0 t: 0

Test#41:
8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()

6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
RETURN COIN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:

11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

1
0

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
RETURN COIN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#42:
6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()

8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1

Test#43:
7
Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup

3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#44:
6
Enter the number of large cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:

1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()

9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#45:

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()

9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2

1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
RETURN COIN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()

6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()

12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
RETURN COIN
1

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()

8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#46:

7
Enter the number of small cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#47:

6
Enter the number of large cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6

Enter the number of large cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

9
RETURN COINS
1

select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()

2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#48:
8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()

5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()

10.dispose()

Other options:
11. show_variables()
12. quit

3
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE LARGE CUP OF TEA
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6

Enter the number of large cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#49:
8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
1
select the method you want to call:
1.coin()

2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
DISPOSE SMALL CUP OF TEA
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()

6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#50:

8
Enter the price to be set for tea:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup

3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()

8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

9
RETURN COINS
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

9
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0

Test#51:

6
Enter the number of large cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

0
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

2
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

3
0
select the method you want to call:
1.coin()

2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()

10.dispose()

Other options:
11. show_variables()
12. quit

9
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1

Test#52:

6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()

9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()

12. quit

6
Enter the number of large cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

50
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup

3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

9
RETURN COINS
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()

10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1

Test#53:
6
Enter the number of large cups to be inserted:

5
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()

7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

1
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

7
Enter the number of small cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

6
Enter the number of large cups to be inserted:

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

8
Enter the price to be set for tea:

25
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()

12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

5
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
0
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()

4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

4
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

9
RETURN COINS
1
select the method you want to call:
1.coin()
2.small_cup
3.large_cup()
4.sugar()
5.tea()
6.insert_large_cups()
7.insert_small_cups()
8.set_price()
9.cancel()
10.dispose()

Other options:
11. show_variables()
12. quit

10
SHUT DOWN
1

Test#54:

6
Enter the number of large cups to be inserted:
5
1

7
Enter the number of small cups to be inserted:
1
1

8
Enter the price to be set for tea:
25
1

1
1

2
1

5
DISPOSE SMALL CUP OF TEA
1

4
0

6
Enter the number of large cups to be inserted:
5
0

8
Enter the price to be set for tea:
25
0

5
0

7
Enter the number of small cups to be inserted:

0
0

2
0

3
0

9
0

10
0

7
Enter the number of small cups to be inserted:
5
1

10
SHUT DOWN
1

Test#55:
6
Enter the number of large cups to be inserted:
1
1

7
Enter the number of small cups to be inserted:

5

1

8

Enter the price to be set for tea:

25

1

1

1

3

1

5

DISPOSE LARGE CUP OF TEA

1

4

0

7

Enter the number of small cups to be inserted:

5

0

8

Enter the price to be set for tea:

0

0

1

RETURN COIN

1

5

0

5

0

6

Enter the number of large cups to be inserted:

0

0

2
0

3
0

9
0

10
0

6
Enter the number of large cups to be inserted:
5
1

10
SHUT DOWN
1

12
Press any key to continue . . .
Exit()

Conclusion

The given project helps in understanding various different methods of testing in depth. There could be some testing which may not find all defects but other testing could find those. Testing different scenarios detects code errors to a larger extent. It's easier to bug fix the code before the code goes into production in real world when proper testing is done. Different kinds of testing like multiple condition testing, model based testing and default testing have been implemented which covers all possible tests and ensures code correctness.