

Stack

Heap

String	1000
e	9000
getSumOfElements	1250
addElement	1150
test	5
1000	1000
S	
main	
argv	"

StrangeDataStructureImpl

current	2000
first	3000
ArrayList	4000
current index	1
odd index	0
even index	0
count	1
isString	-9
getSize()	2
addElement(int k)	add Element(-9)
Element getNextElement()	-8
getSumOfElements	-19
oddVal	true
evenVal	false
setOdd()	odd
setEven()	even
hasMoreElements()	true
Object nextElement()	9000
Object addElement()	-
Object evenElement()	-
Enumeration addElements()	-
Enumeration evenElements()	-

9000 enumeration	True (Element)	hasMoreElements()
		nextElement

2000 Element		3000 Element	
odd	False	odd	True
even	True	even	False
data	-10	data	-9
index	0	index	1
toString	-10	toString	-9
getIndex	index	getIndex	index
isOdd	odd	isOdd	even
isEven	even	isEven	odd

4000	2000
	3000

Stores elements memory addresses
data = i = -10 → 20
add or even and index

Memory Picture for Exercise 5

Software Engineering
Timothy L. A. Kine