

what is an ADT?

An ADT consists of

(1) a set S of mathematical structures,
elements of S are called states.

(2) An associated set of operations
on S .

- manipulation procedures: change the state, returns nothing.
- access functions: don't change, but return a value.

Ex, Integer Queue ADT (FIFO)

states: finite sequence of integers.

		<u>length</u>
<u>ex.</u>	(1, 3, 7, -2, 0)	5
front	(-5, 3)	2
	()	0

operations

- m.p. {
- Enqueue(): insert new int at back
 - Dequeue(): remove int at front
- a.f. {
- getFront(): returns int at front
 - getLength(): returns length
 - isEmpty(): returns True ~~or~~ False depending on whether in empty state.