Array List :-

Java developers were very Confused that The Fixed array is a big problem for them.
Then They Solved that using Array list structure and it's built on Array of objects and it's Like a stack in it's behaviour. we can Called it
Dynamic Array

The Array list has some properties from the side of Complexity :

1. Size : Dynamic
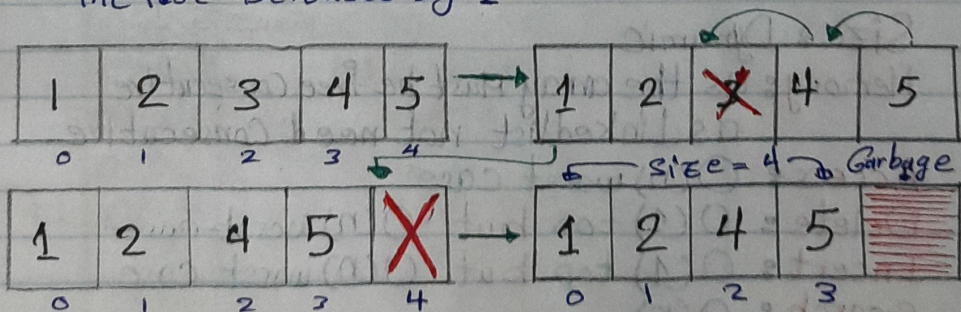2. Memory : Must be consecutive
3. Access : O(1)
4. Delete : O(n) worst Case O(1) best Case
5. Insert : O(n) worst Case O(1) best case
6. Search : O(n)

note: you don't have to delete from Above as the stack, If you deleted an element all his next neighbors are back shifted and size of The list Dereases by 1

1	2	3	4	5
0	1	2	3	4

→

1	2	X	4	5
		size = 4		Garbage

1	2	4	5	X
0	1	2	3	4

→

1	2	4	5	
0	1	2	3	

The same thing happen when we add an element but in inverse approache. The size will be increase by 1 and the next element to it will be shifted forward and the element will be assigned.

put 3

1	2	4	5
0	1	2	3

→

1	2	4	5	
0	1	2	3	4

Put 3

1	2		4	5
0	1	2	3	4

→ size++; A[2]=3;

1	2	3	4	5
0	1	2	3	4