_	Mela t I t I I I O Account
	Abstract data types & Arrays
- har	Anto au Maria de Charles
-	ADTs are the way of classifying data Structures by providing a minimal expected interface and Set of methods
-	by providing a minimal expected interface and
\dashv	Set of methodson to nathanian we not
\dashv	ADT Minimal required functionality
\dashv	to the company of the state of
1	operations
\dashv	ARRAYO - A DOTAL WAS WALLE ALL IN WILLIAM ALL IN WI
\neg	An Array ADT holds the Collection of given elements
\neg	An array ADT holds the collection of given elements accessible by an index.
	Misimal Cureling the int
	Minimal functionality - get (i) -> get element i floot, austom
	Set (i. num) -> Get element i to num
	Set (i, num) → Set element i to num. representation
	Operations - Max()
	Min ()
	Search (num)
	Insert (i, num)
	Append (x)
4	
4	Static and Dynamic arrays
4	
+	Static arrays -> Size lannot be changed
+	
+	Dynamic arrays -> Size lan be changed
+	
+	
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	Quick Aug: Code the Operations mentioned also in Clanguage by creating Array ADT using Structures.
	in Clampunge by creating Array ADT using
iland	Skuchukan
TO ALL D	STUNCTURES Retained to president De presidented Ma
Derit	Memory representation of Arrays
	Index - 0 1 2 3
RUNICUE	7 9 13 2 > Array of Size +
	address + 10 14 18 22 26
	Elements in an array are stored in contiguous
CHOLL	elements in an array are stored in contiguous
1	accossible and index.
30 Jvg.	Elements in an away can be accessed using the base address in constant time -> O(1)
2	base address in Constant time -> O(1)
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	vebreeminhion —
	Doerations - Mari
	() NiM
	(wing ynos
	Insent (c) num.)
	Eppard (x)
	Static and Dynamic arrange
	Storow mouth pur syste
	Statis arrange & Dix amount no thousand
	Static arrays - Sizy lawnot be thought
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	of the same of the