

# Task Three

## Target:

- Implement Dynamic Array

## Task:

Implement Dynamic Array With This Methods :

- [DynamicArray\(\)](#): Default constructor initializes the array with the default capacity.
- [DynamicArray\(int initialCapacity\)](#): Parameterized constructor allows setting an initial capacity for the array.
- [getCapacity\(\)](#): Returns the current capacity of the dynamic array.
- [isEmpty\(\)](#): Checks if the dynamic array is empty.
- [isFull\(\)](#): Checks if the dynamic array is full.
- [resizeArray\(\)](#): Resizes the array when it is full, doubling its capacity.
- [add\(int element\)](#): Adds an element to the dynamic array.
- [isValidIndex\(int index\)](#): Checks if the given index is valid.
- [get\(int index\)](#): Gets an element at a specified index.
- [indexOf\(int element\)](#): Finds the index of a specific element.
- [removeAt\(int index\)](#): Removes an element at a specified index.
- [remove\(int element\)](#): Removes a specific element from the array.
- [clear\(\)](#): Clears all elements from the dynamic array.
- [min\(\)](#): Finds the minimum element in the array.
- [max\(\)](#): Finds the maximum element in the array.
- [printArray\(\)](#): Prints the elements of the array.
- [reverse\(\)](#): Reverses the order of elements in the array.