**1D, 2D, MultiDimensional Array Assignments**

1D Array

**1. Refer the code snippet and answer the queries**

int main()

{

int array[100];

int \*ptr;

// do something

}

**Q1: Can pointer be used in Array-style syntax? e.g. ptr[10], ptr[0]**

1. Yes, pointer be used in Array-style syntax.

**Q2: Can Array be used in Pointer-style syntax? e.g. \*array, \*(array + 0), \*(array + 10)**

1. Yes, array be used in pointer style syntax.

**Q3: is ptr++ valid?**

1. Yes, it is valid. It moves to next address

**Q4: is array++ valid?**

1. It is valid. Array address cannot be changed.

**Q5: what is sizeof(array)?**

1. In above example, sizeof(array) is 100\*4 = 400 bytes.

**Q6: what is sizeof(ptr)?**

A. In above example, sizeof(ptr) is 4 bytes.

**2. Refer the code snippet below. Comment on the other elements (other than those that are explicitly initialized) of all array variables in code snippet below.**

#define MAX 100

int main()

{

int arr[MAX] = {11,22,33}; // arr[3] to arr[99] 🡪 initialized to 0

int arr1[MAX]={0};// arr1[0] to arr[99] 🡪 initialized to 0;

static int arr2[MAX]; All elements are initialized to 0 as they are static.

}