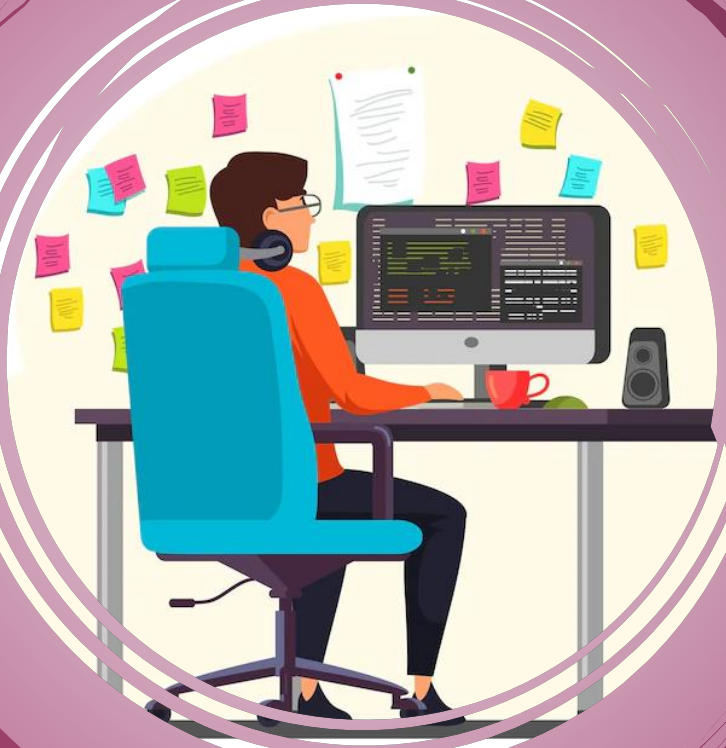
# TAMILNADU ADVANCED TECHNICAL TRAINING INSTITUTE



# PYTHON

# Array

An array is defined as a collection of items that are stored at contiguous memory locations. It is a container which can hold a fixed number of items, and these items should be of the same type.

Contoso

# Operations

- Traverse
- Insertion
- Deletion
- Search
- Update

# Programs

```
import array as arr
a = arr.array('i', [1, 2, 3])

# printing original array
print ("The new created array is : ", end =" ")
for i in range (0, 3):
    print (a[i], end =" ")
print()
```

# Programs

```
import array as arr
a = arr.array('i', [1, 2, 3])
print ("Array before insertion : ", end =" ")
for i in range (0, 3):
    print (a[i], end =" ")
print()
a.insert(1, 4)
print ("Array after insertion : ", end =" ")
for i in (a):
    print (i, end =" ")
```

# Programs

```
import array as arr
 b = arr.array('d', [2.5, 3.2, 3.3])
print ("Array before insertion : ", end =" ")
for i in range (0, 3):
    print (b[i], end =" ")
print()
b.append(4.4)
print ("Array after insertion : ", end =" ")
for i in (b):
    print (i, end =" ")
```

# Programs

```
import array as arr

# array with int type
a = arr.array('i', [1, 2, 3, 4, 5, 6])

print("Access element is: ", a[0])

print("Access element is: ", a[3])
```

# Programs

```
import array
arr = array.array('i', [1, 2, 3, 1, 5])
print ("The new created array is : ", end ="")
for i in range (0, 5):
    print (arr[i], end =" ")
print ("The popped element is : ", end ="")
print (arr.pop(2))
arr.remove(1)
print ("The array after removing is : ", end ="")
for i in range (0, 2):
    print (arr[i], end =" ")
```