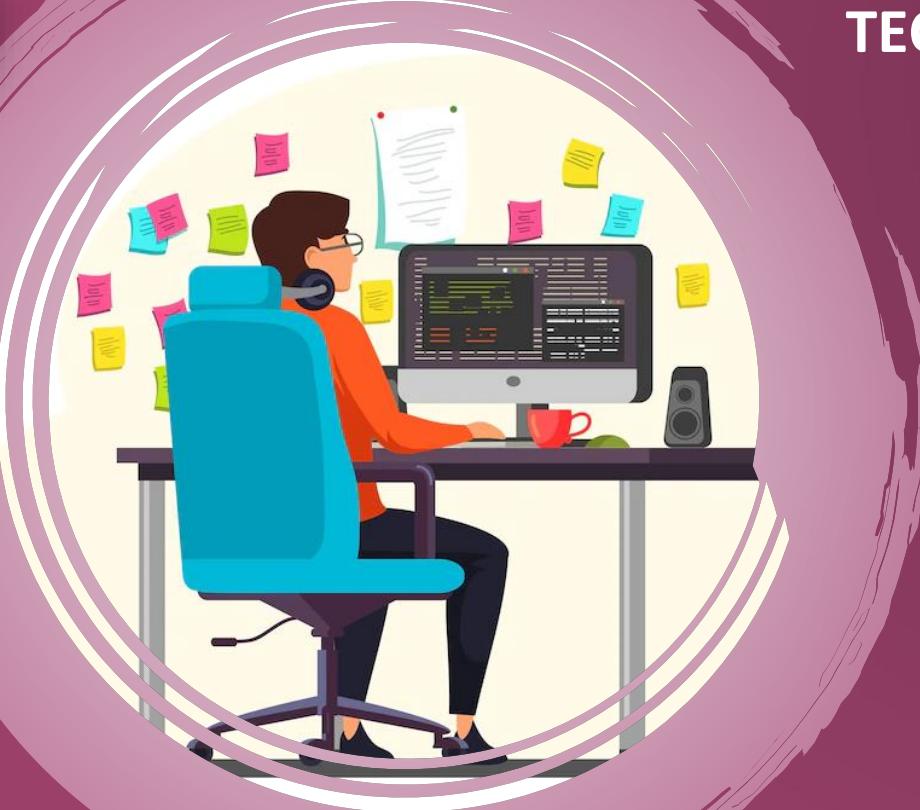




TAMILNADU ADVANCED  
TECHNICAL TRAINING INSTITUTE



PYTHON

# Graphs

A graph is a pictorial representation of a set of objects where some pairs of objects are connected by links. The interconnected objects are represented by points termed as vertices, and the links that connect the vertices are called edges.

# Basic Operation

Display graph vertices

Display graph edges

Add a vertex

Add an edge

Creating a graph

# Types

- Null graph
- Trivial graph
- Undirected graph and Directed graph
- Connected graph and Disconnected graph
- Regular graph
- Complete graph
- Cycle and cyclic graph
- Directed Acyclic graph
- Bipartite graph
- Weighted graph

# NetworkX

NetworkX is a Python language software package for the creation, manipulation, and study of the structure, dynamics, and function of complex networks.

# Matplotlib

Matplotlib is a comprehensive library for creating static, animated, and interactive visualizations in Python.