**SSN College of Engineering, Kalavakkam**

**Department of Computer Science and Engineering**

**III Semester - CSE**

# UCS 1312 Data Structures Lab Laboratory

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| **Academic Year: 2019-2020** | **Batch: 2018-2022** |

**Exercise 12: Shortest Route finding application between cities using Digkstra’s**

**algorithm**

The cityADT contains the number of cities and the connectivity information between the cities (adjacency matrix). Write the following methods.

* void create(cityADT \*C) – will represent the graph using adjacency matrix
* void disp(cityADT \*C) – Display the graph
* void Dikstra\_Algorthm(cityADT \*C, source)

– displays the initial, intermediate and final tables

* char \* displayPath(cityADT \*C, source, destination)

– Find the path of the intermediate cities between the

source and destination cities along with the cost

**Note:**

1. Implement cityADT with the specified operations in cityADTImpl.h
2. Write a menu driven application to utilize the cityADT.