AIFA Installation Guide

Introduction

This repository is for the term project of AIFA course 2021. You can find the original code from the repository.

This repository is an extension that contains code for executing the code for Problem Statement 3. Also, the code has been well commented and organized for easy understanding and use.

Setup

All code was developed and tested on Ubuntu 16.04.6 with C++ language.

General Instruction

- 1. We are giving input for the graph in the form of Adjacency Matrix in a text file. If you want to change the input graph you can change it in the text file. The text file is read line by line where each line represents a row for the adjacency matrix and values are separated by space delimiter. It has to be a square matrix, if the number of rows and columns are not equal then the program terminates with an output error message.
- 2. If you want to change the number of EVs you can change it in the source code. To initiate an object of EV class the parameters should be given as follows: EV(int S_val=0,int D_val=8,float Br_val=0.0,float Cr_val=1.0,float Dr_val=1.0,float Mr_val=10.0,float Sr_val=1.0)
 We have already given some default values to the parameters above so even if certain parameters are not given the object will automatically initiate those values according to the default values given.

Running the program

You can run the commands:

- i) git clone <link of repo> // download the repo files in your current directory
- ii) cd <repo name>
- iii) you will notice the program file with .cpp extension and a text file with name input.txt containing adjacency matrix for the input graph are in same directory g++ aifa_assign1.cpp
- iv) ./a.out // to run the executable file