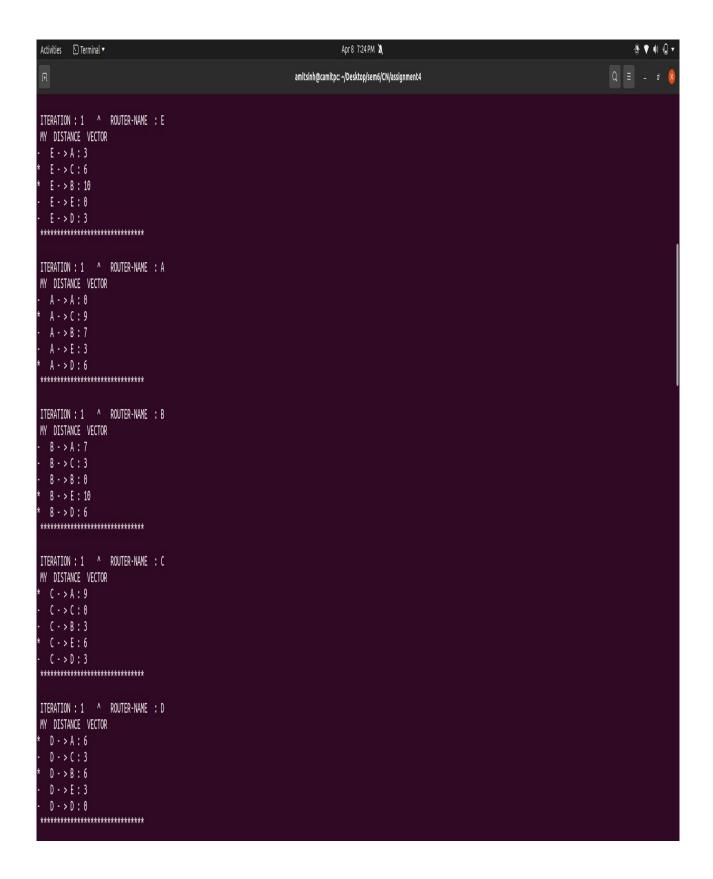
BT18CSE063 : CHAUDHARI AMITSINH CN ASSIGNMENT – 4

Running instructions:

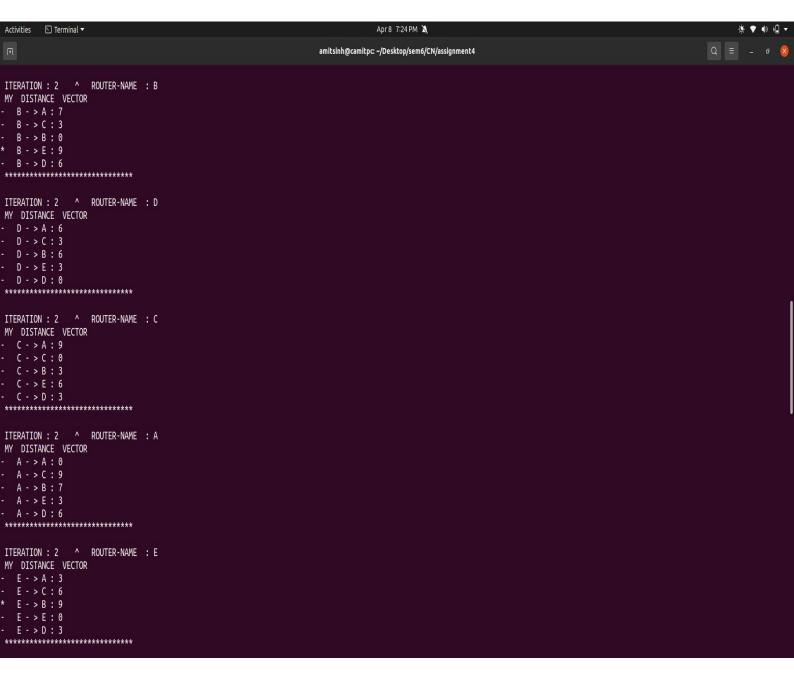
command: python BT18CSE063_dvr.py config_file

Routers distance vectors are intialized in 0^{th} iteration using config_file

```
Apr 8 7:24 PM 🐧
                                                               amitsinh@camitpc: ~/Desktop/sem6/CN/assignment4
mitsinh@camitpc:~/Desktop/sem6/CN/assignment4$ python BT18CSE063_dvr.py config_file1
ITERATION : 0 ^ ROUTER-NAME : E
MY DISTANCE VECTOR
 E - > A : 3
E - > C : 17
 E - > B : 11
 E - > E : 0
 E - > D: 3
*********
ITERATION: 0 ^ ROUTER-NAME: D
MY DISTANCE VECTOR
  D - > A : 12
 D - > B : 1000
 D - > D : 0
*******
ITERATION: 0 ^ ROUTER-NAME: B
MY DISTANCE VECTOR
 B - > C : 3
B - > B : 0
 B - > E : 11
 B - > D : 1000
********
ITERATION: 0 ^ ROUTER-NAME: C
MY DISTANCE VECTOR
 C - > A : 1000
C - > C : 0
  C - > B : 3
 C - > E : 17
********
ITERATION: 0 ^ ROUTER-NAME: A
MY DISTANCE VECTOR
 A - > A : 0
A - > C : 1000
  A - > E : 3
 A - > D : 12
********
```



IN 1st iteration distance vectors are modified by knowing neibhours paths to diff destinations to optimize self distance vectors



 $\ensuremath{^{\text{IN}}}\xspace 2^{\text{nd}}$ iteration also some significant amount of changes happened in routers B , E for converging to optimum reach paths

```
Apr 8 7:24 PM 🐧
                                                          amitsinh@camitpc: ~/Desktop/sem6/CN/assignment4
ITERATION: 3 ^ ROUTER-NAME: C
MY DISTANCE VECTOR
 C - > C : 0
 C - > B : 3
 C - > E : 6
  C - > D : 3
*******
ITERATION : 3 ^ ROUTER-NAME : B
MY DISTANCE VECTOR
 B - > A : 7
 B - > C : 3
 B - > B : 0
 B - > E: 9
  B - > D : 6
*********
ITERATION: 3 ^ ROUTER-NAME: D
MY DISTANCE VECTOR
 D - > A : 6
  D - > C : 3
 D - > B : 6
 D - > E : 3
 D - > D : 0
*********
ITERATION: 3 ^ ROUTER-NAME: E
MY DISTANCE VECTOR
 E - > B : 9
 E - > E : 0
  E - > D: 3
********
ITERATION : 4 ^ ROUTER-NAME : A
MY DISTANCE VECTOR
  A - > A : 0
  A - > C: 9
  A - > B : 7
  A - > E : 3
  A - > D : 6
*********
TTEDATION · 4 ^ DOLITED-NAME
```

IN 3rd iteration no changes happended, so we can conclude routers distance vectors have converged to minimum by bellman ford equation