**EXPERIMENT 5**

**QUESTION:** Find out the values of various parameters in Car service centre, when two service workstation are there for service. The average number of cars being serviced are 10 cars/day and it takes on an average 6 hours to repair a car.

**CODE**

AR=10/24

SR=6

Po=1/(1+(AR/SR)+((AR/SR)^2)\*(SR/((2\*SR)-AR)))

Pb=(1/2)\*((AR/SR)^2)\*(2\*SR/((2\*SR)-AR))\*Po

Lq=(AR\*SR\*((AR/SR)^2)\*Po)/(((2\*SR)-AR)^2)

L=Lq+(AR/SR)

Wq=(SR\*((AR/SR)^2)\*Po)/(((2\*SR)-AR)^2)

W=Wq+(1/SR)

printf("\nProbability that system is empty=")

disp(Po)

printf("Probability that both server are busy-")

disp(Pb)

printf("avg. number in queue=")

disp(Lq)

printf("avg. number in system=")

disp(L)

printf("avg. time in queue=")

disp(Wq)

printf("avg. time in system=")

disp(W)

**OUTPUT**

