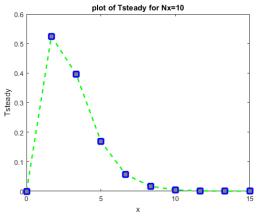
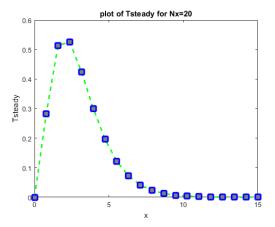
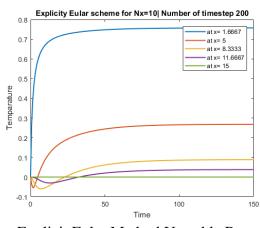
Question-3

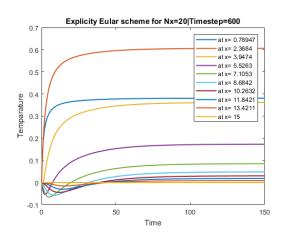
• T_{steady} plot for $N_x=10$ and 20



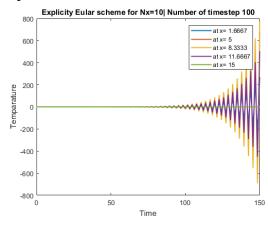


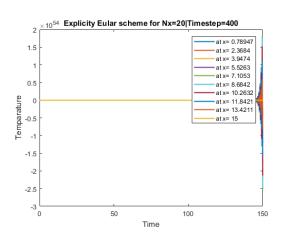
• Explicity Eular Method



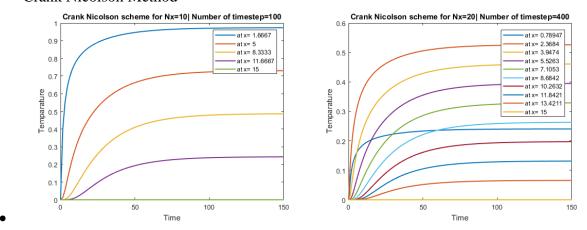


• Explicit Eular Method Unstable Run





• Crank Nicolson Method



The Results shows that the crank Nicolson method is stable at fewer time step run