**MASTER THEOREM SOLUTION**

**a.sol: - T(n)=3T(n/2)+n**

**=> T(n)=Ө(n˄2) (case 3)**

**b.sol: - T(n)=64T(n/8)-(n˄2logn)**

**=> N.A Does not apply. (f(n) is not positive)**

**c.sol: - T(n)=2nT(n/2)+n˄2**

**=>T(n)=Does not apply(a is not constant)**

**d.sol: - T(n)=3T(n/3)+n/2**

**=>T(n)=ϴ(nlogn) (case 2)**

**e.sol: - T(n)=7T(n/3)+ n˄2**

**=> T(n)= Ө(n˄2) (case 3)**