**Time Complexity Problem solutions:**

1. T (n) = 3T (n/2) + n

**Solution = Θ(nlog 2 {base 3})**

1. T (n) = 64T (n/8) − n^2(log n)

**Solution = Θ(n2 log n)**

1. T (n) = 2nT (n/2) + n^n

**Solution = Θ(nn)**

1. T (n) = 3T (n/3) + n/2

**Solution = Θ(nlog n)**

1. T (n) = 7T (n/3) + n^2

**Solution = Θ(n2)**