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ASSIGNMENT-DAY-1

1.) Find the time complexity for the following scenarios

        a.) for(i=1;i<=n;i++)   =>   n – 1 + 1 = O(n)

        for(j=i;i<=n;j++)   =>   n - 1 * n

        printf("Hi");   =>   n – 1 * n * 1

        ⇨   n + (n – 1 * n) + (n – 1 * n) => n + 2(n-1*n) => <u>O(n^2)</u>

        b.) for(i=1;i<=n;i*=3)   => O(log n)

        for(j=1;i<=n;j++)   => log n * n

        printf("Hello");   => log n * (n-1) * 1

        ⇨   log n + log n * n + log n * (n - 1) => <u>O (log n ^ 2)</u>