Day 1 Assignment1 DSA essentials

Question1:

1. Find the time complexity for the following scenarios
2. for(i=1;i<=n;i++)

for(j=i;i<=n;j++)

printf("Hi");

Answer –

Time complexity is –

= 2\*(n+1)\*2\*(n+1)=4n^+8n+4

=O(n^2)

1. for(i=1;i<=n;i\*=3)

for(j=1;i<=n;j++)

printf("Hello");

Answer -

Time complexity is –

= n+n/2+n/3+……….1

= n(logn)

= O(nlogn)