NIVASINI.B

① what is the time complexity of the code.

```
int a=0;
for (int i=0; i<n; i++)        O(n)
{
    for (int j=n; j>i; j--)    O(n)
    {
        a = a+i+j;
    }
}
```

Ans: Time complexity is $O(n^2)$

② what is the time complexity of the code

```
int count =0;
for (int i=1; i<=n; i=i*2)      O(logn)
{
    for (int j=1; j<=i; j++)    ⟹ Executes n times
    {                                              O(n)
        count = count +1;
    }
}
```

Ans: Time complexity is $O(n \log n)$.