QUESTION (1):

a)
```
for(i=1;i<=n;i++)
{
for(j=i;i<=n;j++)
{
   ("Hi");
}
}
```

Answer=>

Here we're nesting two loops. If our array has n items,
our outer loop runs n times and our inner loop runs n times
for each iteration of the outer loop, giving us n2 total prints.
Thus this function runs in O(n2) time (or "quadratic time").
If the array has 10 items, we have to print 100 times.
If it has 1000 items, we have to print 1000000 times.

b)
```
for(i=1;i<=n;i*=3)
{
for(j=1;i<=n;j++)
{
   printf("Hello");
}
}
```

Answer=>

here time complexity is O(log(n))