Q

```
for (int i = 1; i <= n; i++) {
    for (int j = 1; j <= 3^i; j++) {
        print (i+j);
    }
}
```

⇒ The inner loop runs these many times as the outer loop iterates / 'i' increments

$3^1, 3^2, 3^3, \ldots, 3^n$

$\therefore$ Σ iterations $= 3^1 + 3^2 + 3^3 + \ldots + 3^n$

$$\frac{a(r^N - 1)}{r - 1}$$

$$= \frac{3(3^N - 1)}{3 - 1} = \frac{3}{2}(3^N - 1)$$

$\therefore$ **T.C = $O(3^N N)$**