```c
void function_iterative(int n)
{
    while (n >= 1)
    {
        for (int i = 1; i <= n; i++)
            for (int j = 1; j <= n; j++)
                printf("*");
        n -= 3;
    }
}
```

$T(n) = T(n-3) + O(n^2)$

nr. de apeluri recursive e $\simeq k = \frac{n}{3}$

$\Rightarrow T(n) = n^2 + (n-3)^2 + (n-6)^2 + \dots =$

$= \sum_{k=0}^{\frac{n}{3}} (n-3k)^2 = \sum_{k=0}^{\frac{n}{3}} (n^2 - 6kn + 9k^2) =$

$= \sum_{k=0}^{\frac{n}{3}} n^2 - \sum_{k=0}^{\frac{n}{3}} 6kn + \sum_{k=0}^{\frac{n}{3}} 9k^2$

$\sum_{k=0}^{\frac{n}{3}} n^2 = \left(\frac{n}{3} + 1\right) \cdot n^2 \Rightarrow O(n^3)$

$\sum_{k=0}^{\frac{n}{3}} 6kn = 6n \cdot \sum_{k=0}^{\frac{n}{3}} k = 6n \cdot \frac{\frac{n}{3}\left(\frac{n}{3}+1\right)}{2}$ $O(n^3)$

$\sum_{k=0}^{\frac{n}{3}} 9k^2 = 9 \cdot \frac{\frac{n}{3}\left(\frac{n}{3}+1\right)\left(2 \cdot \frac{n}{3}+1\right)}{6} \Rightarrow O(n^3)$

Cum fiecare termen are $O(n^3) \Rightarrow$ și suma va avea $O(n^3)$

$T(n) \in O(n^3),\ T(n) \in \Omega(n^3) \Rightarrow T(n) = \Theta(n^3)$