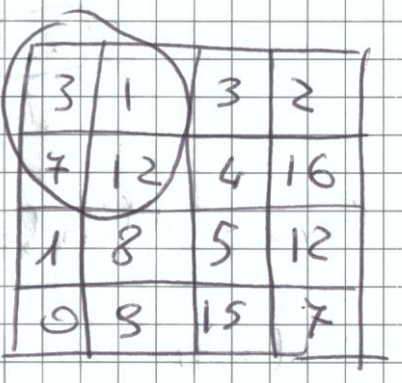
ESERCIZIO 24° - 1° PARTE (Prob. soluzione migliore)

```
for i=1 to n
    for j=1 to n                                   T(n) = Θ(n²)
        if (A[i][j]=k) return true
return false
```

ESERCIZIO 25° - 1° PARTE




```
MIN(A, m, n)
  if |A|=1 return A
  else
    A1 = A[1..n/2, 1..m/2]
    A2 = A[n/2+1..n, m/2+1..m]
    A3 = A[n/2+1..n, 1..m/2]
    A4 = A[1..n, m/2+1..m]
  return min{MIN(A1), MIN(A2), MIN(A3), MIN(A4)}      MIN(n/2, m/2)
```

$$T(n) = \begin{cases} 1 & \text{se } (n=1, m=1) \\ T(n/4) + d & \text{altrimenti} \end{cases}$$

$d = \Theta(1)$

$c = 4$

$k = 0$

$d \geq c^k$

$O(n^0 \log n) = O(\log n)$