

ESERCIZIO 15<sup>a</sup> - 2<sup>o</sup> parte

MARRIOTT K (A[1..n], k)

IF (m = 1) then return A ELSE

x = SELECT (A[1..n], k)

A<sub>1</sub> = QUICKSORT (A[m-k+1..m])

for i = 0 to k-1

B[i] = A<sub>1</sub>[i]

return B

SELECT ha TEMPO  $\Theta(n)$

QUICKSORT ha TEMPO  $\Theta(k \log k)$

FOR ha tempo  $\Theta(k)$

END T(m) =  $\Theta(m + k \log k)$

MARRIOTT K (A[1..n], k)

IF m = 1 OR k ≥ m return A

else

x = SELECT (A, m - k)

for j = 0 to m - k

for i = 1 to m

if A[i] ≥ x

B[j] ← A[i]

j ← j + 1

QUICKSORT (B)

endif

ERRATO