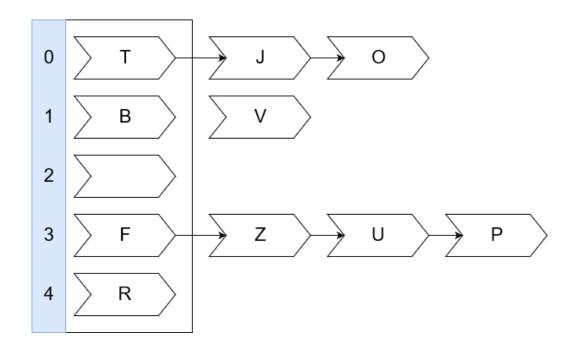
## INF102mandatory2 - CGJ008

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## [1] Hash maps

a)



b) 14 0 1 2 3 5 6 7 8 9 10 11 12 13 15 U Ζ J 0 В R F ٧

## [3] Big-O Quiz part II

Function	f	O
а	2n + m	O(n+m)
b	n*m+n	O(n*m)
С	$min\{m,n\}$	$O(min\{m,n\})$
d	$(\log_2 n) * m + m$	O(m * log n)
е	1	0(1)
f	$n*m+\left\lceil\frac{n}{2}\right\rceil$	O(n*m)

g	n*m+n	O( <i>n</i> * <i>m</i> )
h	n + k	O(n+k)
i	$\frac{n(n+1)}{2}*k$	$O(n^2 * k)$
j	$2n^2 + k^2 + 2nk$	$O(n^2 + k^2 + nk)$
k	n+m	O(n+m)
I	n+m	O(n+m)
m	$\left\lceil \frac{m}{n} \right\rceil$	$O\left(\frac{m}{n}\right)$
n	$\left\lfloor \frac{\log n}{\log k} \right\rfloor + 1$	$O(\log n)$
0	$\left\lceil \frac{n}{2k} \right\rceil$	$O\left(\frac{n}{k}\right)$
р	$\left\lfloor \frac{k^n - 1}{k - 1} \right\rfloor$	$O(k^{n-1})$