?
strut-
ture
dati
suc-
cinte
N
$\log N+$
$o(\log N)$
n
$n+$
$o(n)$
$N_n =$
?
?
?
bitvec-
tor
bitvec-
tor
B
n
$B[i] \in \{0, 1\},\ \forall i 0 \leq i < n$
(1)
$B[i] \in \{\bot, \top\},\ \forall i 0 \leq i < n$
(2)
ran-
dom
ac-
cess
Suc-
cinct
Data
Struc-
ture
Li-
brary
(*SDSL*)
?
??
i
$\mathcal{O}(n)$
bitvec-
tor
$o(n)$
bitvec-
tor
n
$\sigma =$
1
$\sigma =$
$\top$
m
K
block
size
in-
ter-
leave

Variante	Spazio occupato
Plain bitvector	$64\left\lceil \frac{n}{64} + 1 \right\rceil$
Interleaved bitvector	$\approx n\left(1 + \frac{64}{K}\right)$
H_0*-compressed bitvector*	$\approx \left\lceil \log nm \right\rceil$
Sparse bitvector	$\approx m\left(2 + \log \frac{n}{m}\right)$

rango
B
n
i
bitvec-
tor

$$_B(i) = \sum_{k=0}^{k<i} B[k],\ \forall i 0 \leq i < n$$

(3)
$o(n)$
$\mathcal{O}(1)$
??
n
$\sigma =$
1
$\sigma =$
$\top$
m
k
rank
sam-
ple

Variante	Bit aggiuntivi	Complessità temporale
Plain bitvector	$0.0625 \cdot n$	$\mathcal{O}(1)$
Interleaved bitvector	128	$\mathcal{O}(1)$
H_0*-compressed bitvector*	80	$\mathcal{O}(k)$
Sparse bitvector	64	$\mathcal{O}\left(\log \frac{n}{m}\right)$

$\sigma =$
1
B
n
i
i
B

$$_B(i) = \min\{j < n \mid rank_B(j{+}1) = 1\},\ \forall i 0 < i \leq rank_B(n)$$

(4)
??
n

Variante	Bit aggiuntivi	Complessità temporale