$$high(x) = \left\lfloor x/\sqrt{u} \right\rfloor$$

$$low(x) = x \bmod \sqrt{u}$$

$$T(u) = 2\sqrt{u}(\sqrt{u}) - 1 \text{ b/c}$$
$$\sqrt{u} \quad \frac{\sqrt{u}}{O(\lg u)}$$

Insert $(V, x)$:

    Insert $(V.cluster[high(x)], low(x))$

    Insert $(V.summary, high(x))$

Successor $(V, x)$

    $i = high(x)$

    $j = Successor(V.cluster[i], low(x))$

    if $j = \infty$:

        $i = Successor(V.summary, i)$

        $j = Successor(V.cluster[i], -\infty)$

    return $index(i, j)$

$$O(\lg u^{\lg 3})$$

```
VEB-Succ (V, x)
  if V.u == 2
    if x == 0 i V.max == 1
        return 1
    else return NIL

  elseif V.min ≠ NIL & x < V.min
        return V.min

  else
      max-low = VEB-MAX(V.cluster(high(x)))
      if max-low ≠ NIL & low(x) < max-low
        offset = VEB-Succ(V.cluster(high(x)), low(x))
        return index(high(x), offset)

      else
        Succ-cluster = VEB-Succ(V.summary, high(x))
        if Succ-cluster == NIL
            return NIL

        else
            offset = VEB-MINI(V.cluster[Succ-clust])
            return index(Succ-cluster,
                              offset)
```