```
Space-Efficient-Alignment(X, Y)
  Array B[0...m, 0...1]
  Initialize B[i, 0] = iδ for each i (just as in column 0 of A)
  For j = 1, ..., n
     B[0, 1] = jδ (since this corresponds to entry A[0, j])
     For i = 1, ..., m
          B[i, 1] = min[α_{x_i y_j} + B[i − 1, 0],
                                δ + B[i − 1, 1],   δ + B[i, 0]]
     Endfor
     Move column 1 of B to column 0 to make room for next iteration:
          Update B[i, 0] = B[i, 1] for each i
  Endfor
```