

```

In-
put:
lengths
samplespecificstrings
target
reference
Output:
target
    reverted ←
    []
    i ←
    1
    indexes[i]
    k ←
    indexes[i+
    1]
    j ==
    -1
    k ==
    -1
CON-
TINUE
    middle ←
    target[j+
    lengths[i] :
    k]
    middle ==
    0
CON-
TINUE
    middle ←
REVERT_AND_COMPLEMENT(middle)
    (found, start) ←
CHECK_SUBSTRING(reference, middle)
    found
    leftincrement ←
    1
    leftincrement ≤
    lengths[i]
    (j+
    lengths[i]-
    leftincrement) ≥
    0
    target[j+
    lengths[i]-
    leftincrement] ==
REVERT_AND_COMPLEMENT(reference[start+
    middle.length+
    leftincrement-
    1])
    leftincrement ←
    leftincrement+
    1
    leftbreakpoint ←
    target[j+
    lengths[i]-
    leftincrement :
    j+
    lengths[i]-
    leftincrement+
    2]
    rightincrement ←
    0
    rightincrement <
    (reference.length-
    start-
    len(middle))
    (k+
    rightincrement) <
    target.length
    target[k+
    rightincrement] ==
REVERT_AND_COMPLEMENT(reference[start-
    1-
    rightincrement])
    rightincrement ←
    rightincrement+
    1
    rightbreakpoint ←
    target[k+
    rightincrement-
    1 :
    k+
    rightincrement+
    1]
PRINT
    leftbreakpoint

```