```
swap:
  slli x6, x11, 2 # reg x6 = k * 4
  add x6, x10, x6 # reg x6 = v + (k * 4)
  lw x5, 0(x6)    # reg x5 (temp) = v[k]
  lw x7, 4(x6)    # reg x7 = v[k + 1]
  sw x7, 0(x6)    # v[k] = reg x7
  sw x5, 4(x6)    # v[k+1] = reg x5 (temp)
  jalr x0, 0(x1)  # return to calling routine
```