Changes to \( y \) inside \( f \) will be reflected at \( A[0] \) and \( k \).

AR contains pointers when passing by reference.

- \( x \) passed by value, \( y \) by reference
- \( x \) passed by reference, \( y \) by value

Printed in \( f \):
- \( x:2 \)
- \( y:-2 \)
- \( k:1 \)
- \( A[0]:0 \)
- \( A[1]:0 \)
- \( A[2]:1 \)
- \( A[3]:2 \)

Printed in main:
- \( x:2 \)
- \( k:2 \)
- \( A[0]:-2 \)
- \( A[1]:0 \)
- \( A[2]:1 \)
- \( A[3]:2 \)

- \( x \) and \( y \) passed by value – result
- Copy the values of \( k (=0) \) and \( A[k] (A[0]=0) \) into the function. This part is similar to call by value. Once the function ends, copy back the values of \( x \) and \( y \) to \( k \) and \( A[0] \).

Printed in \( f \):
- \( x:3 \)
- \( y:3 \)
- \( k:3 \)
- \( A[0]:-1 \)
- \( A[1]:0 \)
- \( A[2]:1 \)
- \( A[3]:3 \)

Printed in main:
- \( x:3 \)
- \( k:3 \)
- \( A[0]:-1 \)
- \( A[1]:0 \)
- \( A[2]:1 \)
- \( A[3]:3 \)

- \( x \) and \( y \) passed by name
- Blatanlty substitute the function call with the function body, replacing \( x \leftrightarrow k \) and \( y \leftrightarrow A[k] \).
- Note that \( A[k] \) will be evaluated based on what \( k \)'s value is when \( A[k] \) is first used.