

## Contours done using ChatGPT

**A.**

STACK

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Frame:  $f(y=2)$

$y \rightarrow 2$

$x \rightarrow y+1 \rightarrow 3$

Loop iteration 0:

$i \rightarrow 0$

$\text{temp} \rightarrow 0^*2 + 3 = 3$

Loop iteration 1:

$i \rightarrow 1$

$\text{temp} \rightarrow 1^*2 + 3 = 5$

Loop iteration 2:

$i \rightarrow 2$

$\text{temp} \rightarrow 2^*2 + 3 = 7$

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Frame: main

$x \rightarrow 2$

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**B.**

STACK

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Frame: block scope

a → 10 (SHADOWS main.a)

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Frame: main

a → 5

ref\_To\_An\_A —————► a (in main)

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**C.**

HEAP

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(int) 42 ←—— p, q

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STACK

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Frame: block

q —————► (heap int 42)

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Frame: main

p —————► (heap int 42)

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**D.**

HEAP

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(int) 42 ←—— p, q

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STACK

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Frame: block

q —————► (heap int 42)

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Frame: main

p —————► (heap int 42)

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