

2000 AP[®] Computer Science
A Question 1

Part A:	IsMode	2 pts
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+1 attempt (needs at least one on task comparison, `>=` is OK, `||` instead of `&&`)

+1 correct (1 for true and 0 for false is OK)

Note: loop that bears no relation to `k` or that destroys `k` gets no points

Part B:	ModeIndex	2 pts
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+1 search array

+1/2 attempt

+1/2 correct (note: any length bound `> data.length()` or no length bound works)

+1 identify and return mode index

+1/2 attempt (calls `IsMode` or reimplements it – reimpl must be perfect to get attempt)

+1/2 correct

Note: `IsMode` function used as `void` function loses the full identify mode index point

Note: Without a loop, `IsMode` must be called correctly to earn mode index attempt 1/2 point

Part C:	PrintHistogram	5 pts
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+1 get value of mode

+1/2 attempt (must attempt to find mode index before printing anything)

+1/2 correct

(`k = ModeIndex(data)` loses correct if `data[k]` is not used later in the computation)

+1 scan array

+1/2 attempt (must have attempt to scan the data and draw a bar in loop)

+1/2 correct

+2 compute correct bar length

+1 attempt (must use mode value and `longestBar`)

(In the absence of a mode value, must use a data element and `longestBar`)

+1 correct

+1 draw bar

+1/2 attempt (must have a loop)

+1/2 correct (must use `barChar` and include `endl`)

NOTE: If `A[k]` is used instead of `data[k]`, it is -1/2 usage, confused id