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int ug = 0, og = a.length-1, m = 0, pos = NOTFOUND
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while (ug <= og && pos == NOTFOUND)
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m = (ug + og) / 2
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if (a[m] == k)
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pos = m
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if (a[m] < k)
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ug = m + 1
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og = m - 1
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return
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graph TD; Init["int ug = 0, og = a.length-1, m = 0, pos = NOTFOUND"] --> While["while (ug <= og && pos == NOTFOUND)"]; While --> MCalc["m = (ug + og) / 2"]; MCalc --> IfEq["if (a[m] == k)"]; IfEq --> PosM["pos = m"]; PosM --> While; IfEq --> IfLess["if (a[m] < k)"]; IfLess --> UgInc["ug = m + 1"]; IfLess --> OgDec["og = m - 1"]; UgInc --> While; OgDec --> While; While --> Return["return"];
```