

# Activity

Write a recurrence to describe the running time of this code. What's the big-O?

```
DivConqExponentiation(int a, int b, int n)
    if(n==0) return 1
    if(n==1) return a%b
    int k = divConqExponentiation(a,b,n/2) /*int div*/
    if(n%2==1) return (k*k*a)%b
    return (k*k)%b
```

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