```
1: int power( int n, int k)
2: if k == 0 then
3: return 1
4: end if
5: if k is odd then
6: return (n * power (n \times n, \frac{(k-1)}{2}))
7: else
8: return (power(n \times n, \frac{k}{2}))
9: end if
```