

Pow(x,n)

Question: Implement pow(x, n).

For Example: pow(3,2) returns 9

Solutions:

class Solution:

@param x, a float

@param n, a integer

@return a float

def pow_recursive(self, x, n):

if n==0:

return 1

if n<0:

return 1.0/self.pow_recursive(x,-n)

if n%2==1:

return x*self.pow_recursive(x*x,int(n/2))

else:

return self.pow_recursive(x*x,int(n/2))

@param x, a float

@param n, a integer

@return a float

def pow_iterative(self, x, n):

result=1

if n<0:

n=-n

flag=1

```
else:
    flag=0
while n>0:
    if n%2==1:
        result=result*x
    x=x*x
    n/=2
if flag==0:
    return result
else:
    return 1.0/result
```

`Solution().pow_recursive(3.0,2)`