
```
procedure BINARY_EXP( $x, n$ )  
  if  $n = 0$  then return 1  
  if  $n = 1$  then return  $x$   
  
  if  $n \% 2 = 0$  then  
     $y \leftarrow \text{Binary\_Exp}(x, n/2)$   
    return  $y * y$   
  else  
     $y \leftarrow \text{Binary\_Exp}(x, \lfloor n/2 \rfloor)$   
    return  $x * y * y$ 
```
