

MODULE *tp3*

EXTENDS *Naturals, Integers, TLC*

CONSTANT *MAXINT*, *u*, *v*

-termination

– *wfNext*

--algorithm *Power*{

variables *x1* = *u* ; 1st integer
 x2 = *v* ; 2nd integer
 y1 = 0 ;
 y2 = 0 ;
 y3 = 0 ;
 z = 0 ;

{
 l1: **print** $\langle x1, x2 \rangle$;

 y1 := *x1* ;
 y2 := *x2* ;
 y3 := 1 ;
 l2: **while** (*y2* ≠ 0) {
 L3: **if** (*y2*%2 ≠ 0) {
 l4: *y2* := *y2* − 1 ;
 l5: *y3* := *y3* * *y1* ;
 } ;
 l6: *y1* := *y1* * *y1* ;
 l7: *y2* := *y2* ÷ 2 ;
 } ;
 l8: *z* := *y3* ;
 l9: **print** $\langle x1, x2, z \rangle$;
}

\ * Modification History

\ * Last modified *Thu Sep 29 08:48:11 CEST 2016* by *mery*

\ * Created *Wed Sep 09 17:02:47 CEST 2015* by *mery*