```
function POWER(\lambda: integer; \beta: real number)
\epsilon \leftarrow |\lambda|
 \rho \leftarrow 1
                                                                           \triangleright multiply \beta by itself |\lambda| times
 while \epsilon > 0 do
      \rho \leftarrow \rho \times \beta
       \epsilon = 1
 if \lambda < 0 then
                                                                       \triangleright \lambda is negative so get the inverse
      \rho \leftarrow \frac{1}{2}
```

return  $\rho$