

```

function INSERT( $\lambda$ : integer;  $\rho_1, \dots, \rho_\epsilon$ : integers in increasing order)
  if  $\rho_\epsilon \leq \lambda$  then
     $\rho_{\epsilon+1} \leftarrow x$ 
  else
     $\iota \leftarrow \epsilon$ 
    while  $\iota \wedge \langle \lambda < \rho_\iota \rangle$  do                                      $\triangleright$  make room for  $\lambda$ 
       $\rho_{\iota+1} \leftarrow \rho_\iota$ 
       $\iota -= 1$ 
     $\rho_{\iota+1} \leftarrow \lambda$ 
  return  $\rho_1, \rho_2, \dots, \rho_{\epsilon+1}$ 

```