

EJERCICIO 4.2

September 5, 2021

```
proc histHabitacional(in th : ephh, in ti : ephi, in k : z, out res : seq⟨Z⟩)

Pre[validarEncuesta(th : ephh; ti : ephi)]

Post[| res |= 0 ∨L (HayMaximoDeHabitaciones(res) ∧L (∀i ∈ Z)(0 ≤ i < |
res | ∧L res[i] = @HabitacionesPorCasa(th, k, i + 1))]
```

1 Funciones y predicados auxiliares

```
pred HayMaximoDeHabitaciones(res : seq⟨Z⟩)
(∃ k ∈ Z)(k = | res | ∧ res[k - 1] > 0)

aux @HabitacionesPorCasa(th : ephh, region : Z, habitaciones : Z) : Z
∑j=0|th|-1 s(j) (if (th[j][@region] = region ∧ th[j][@iv1] = 1 ∧ th[j][@iv2] =
habitaciones) then s(j) = 1 else 0 fi)

]
```