| TAD CustomHashMap |
| --- |
| CustomHashMap =  { Size = <size>, Table = <table>, Default\_Capacity = <16>, Load\_Factor = <0.75> } |
| { inv: CustomHashMap.size >= 0 } |
| Operaciones Primitivas:   * CustomHashMap: → CustomHashMap * Put: Key x Value → CustomHashMap * Get: Key → Value * Remove: Key → Value * Size: → Integer * Hash: Key → Integer * GetIndex: Hash → Integer * Resize: →HashTable * KeySet: →CustomLinkedList |

| CustomHashMap() |
| --- |
| “Creates a new CustomHashMap with size 0” |
| { pre: } |
| { pos: CustomHashMap = { Size = <size>, Table = <table>, Default\_Capacity = <16>, Load\_Factor = <0.75> } } |

| Put(K, V) |
| --- |
| “Inserts a new value into the HashMap” |
| { pre: HashMap != null, K != null } |
| { pos: size++, (K, V) ∈ table } |

| Get(K) |
| --- |
| “Returns the value of a key” |
| { pre: Key != nil } |
| { pos: <Value> } |

| Remove(K) |
| --- |
| “Deletes an element from the table and returns its value” |
| { pre: Key != nil } |
| { pos: <Value>, <Value> ∉ table } |

| Size() |
| --- |
| “Returns size of HashMap” |
| { pre: HashMap != null } |
| { pos: <Size> } |

| Hash(K) |
| --- |
| “Returns the hashcode of a map entry” |
| { pre: Key != nil } |
| { pos: <Hash> } |

| GetIndex(Hash) |
| --- |
| “Returns the index to which a Hash belongs to” |
| { pre: } |
| { pos: <Index> } |