```
TABLE-INSERT (T, x)
1 if T.size == 0
         allocate T. table with 1 slot
        T.size = 1
   if T.num == T.size
         allocate new-table with 2 \cdot T. size slots
         insert all items in T.table into new-table
        free T.table
        T.table = new-table
         T.size = 2 \cdot T.size
10
    insert x into T.table
    T.num = T.num + 1
```