

(8 marks)

You have to fill in the table in this question!

Draw in a given picture file (you can use Paint or any other program) and submit the picture file in Mycourseville.

- A separate chaining hash table for integer (hash function  $\text{hash}(x) = x \% \text{tableSize}$ ) has 7 slots.
- In each slot, it stores a double hashing hash table (with 5 slots) (hash function  $h(x) = x \% \text{tableSize}()$ ,  $f(i) = i * h2(x)$ , where  $h2(x) = 3 - (x \% 3)$ ).
- For simplicity, the hash tables in this question are never rehashed.
- For data addition, no duplicated data is allowed.
- For deletion, use lazy deletion, and the Deleted slot can be reused in future addition.
- Fill in what the table look like eventually, if the following takes place in sequence:
  - Add 5, 26, 12, 40
  - Delete 12, delete 5
  - Add 47, 12

