

Test case - 1

User choices:

1. Create new ExtendibleHashTable
 2. Add an element to the HashTable
 3. Search an element to the HashTable
 4. Delete an element from the HashTable
 5. Print HashTable
- Any other choice to exit

Input flow:

- Taking choice 1 [line 1], asks inputs for global depth and number of entries in the bucket.
- After taking the inputs [line 2&3], it creates the Extendible hash table of directory size 4 and bucket size 1.
- Taking choice 2 [line 4], asks input and inserts the input value "0" into hash table.
- Taking choice 2 [line 6], asks input and inserts the input value "1" into hash table.
- Taking choice 2 [line 8], asks input and inserts the input value "2" into hash table.
- Taking choice 2 [line 10], asks input and inserts the input value "3" into hash table.
- Taking choice 5 [line 12], it prints the current state of hash table. (ref. output file [line 2])
- Taking choice 2 [line 13], asks input and inserts the input value "4" into hash table.
- While inserting value "4", it requires **doubling** of the directory and **splitting** of the current bucket.
- Taking choice 5 [line 15], it prints the current state of the hash table. (ref. output file [line 12])
- Taking choice 2 [line 16], asks input and inserts the input value "5" into hash table.
- While inserting value "5", it requires **splitting** of the current bucket.
- Taking choice 2 [line 18], asks input and inserts the input value "6" into hash table.
- While inserting value "6", it requires **splitting** of the current bucket.
- Taking choice 2 [line 20], asks input and inserts the input value "7" into hash table.
- While inserting value "7", it requires **splitting** of the current bucket.
- Taking choice 5 [line 22], it prints the current state of the hash table. (ref. output file [line 22])
- Taking choice -1 [line 23], it exits the program.