

Test case - 4

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 2 and bucket size 4.
- Taking choice 2 [line 4], asks input and inserts the input value "64" into hash table.
- Taking choice 2 [line 6], asks input and inserts the input value "51" into hash table.
- Taking choice 2 [line 8], asks input and inserts the input value "4" into hash table.
- Taking choice 2 [line 10], asks input and inserts the input value "16" into hash table.
- Taking choice 2 [line 12], asks input and inserts the input value "15" into hash table.
- Taking choice 2 [line 14], asks input and inserts the input value "12" into hash table.
- Taking choice 2 [line 16], asks input and inserts the input value "5" into hash table.
- Taking choice 2 [line 18], asks input and inserts the input value "10" into hash table.
- While inserting value "10", it requires **doubling** of the directory and **splitting** of the current bucket.
- Taking choice 5 [line 20], it prints the current state of hash table. (ref. output file [line 2])
- Taking choice 2 [line 21], asks input and inserts the input value "18" into hash table.
- Taking choice 2 [line 23], asks input and inserts the input value "20" into hash table.
- While inserting value "20", it requires **doubling** of the directory and **splitting** of the current bucket.
- Taking choice 2 [line 25], asks input and inserts the input value "7" into hash table.
- Taking choice 2 [line 27], asks input and inserts the input value "21" into hash table.
- While inserting value "21", it requires **splitting** of the current bucket.
- Taking choice 5 [line 29], it prints the current state of hash table. (ref. output file [line 11])
- Taking choice -1 [line 30], it exits the program.