Test case - 3

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 director size 4 and bucket size 4.
- Taking choice 2 [line 4], asks input and inserts the input value “15” into hash table.
- Taking choice 2 [line 6], asks input and inserts the input value “4” into hash table.
- Taking choice 2 [line 8], asks input and inserts the input value “1” into hash table.
- Taking choice 2 [line 10], asks input and inserts the input value “10” into hash table.
- Taking choice 2 [line 12], asks input and inserts the input value “5” into hash table.
- Taking choice 2 [line 14], asks input and inserts the input value “7” into hash table.
- Taking choice 2 [line 16], asks input and inserts the input value “21” into hash table.
- Taking choice 2 [line 18], asks input and inserts the input value “12” into hash table.
- Taking choice 2 [line 20], asks input and inserts the input value “19” into hash table.
- Taking choice 2 [line 22], asks input and inserts the input value “32” into hash table.
- Taking choice 2 [line 24], asks input and inserts the input value “16” into hash table.
- Taking choice 2 [line 26], asks input and inserts the input value “13” into hash table.
- Taking choice 5 [line 28], it prints the current state of hash table. (ref. output file [line 2])
- Taking choice 2 [line 29], 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 5 [line 31], it prints the current state of hash table. (ref. output file [line 12])
- Taking choice 2 [line 32], asks input and inserts the input value “9” into hash table.
- While inserting value “9”, it requires **splitting** of the current bucket.
- Taking choice 5 [line 34], it prints the current state of hash table. (ref. output file [line 25])
- Taking choice -1 [line 35], it exits the program.