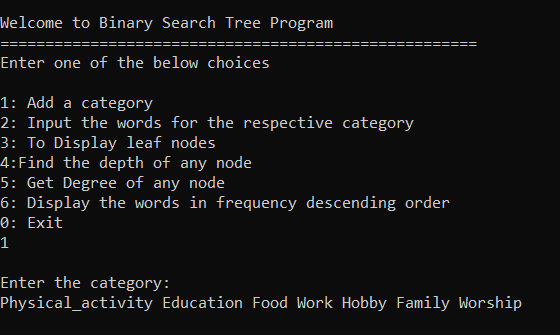
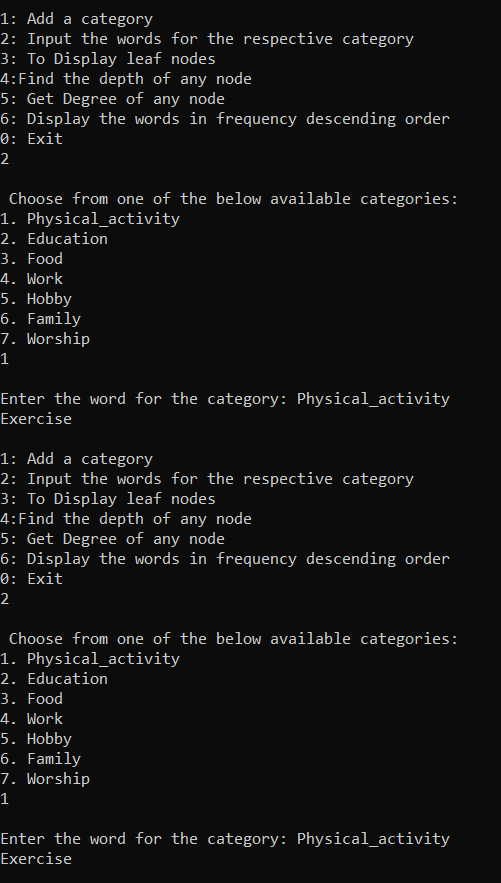
**Question 1: Accept the list of words (input) as a category. The following list of words to be mapped in the respective basket as (group/cluster) of above categories and each word is assigned with the number as frequency. You have to accept the word number of times based on the frequency given through keyboard randomly.**

* The problem is solved by making use of arrays
* Program is written on C with these basic functions.
* (i) **checkl1(char \*category, struct node \*root):** is used to check whether a category already exists, while adding new categories to the program.
* (ii) **nodedepth(struct node \*root,char \*inputstring)**: this function takes input as the root the tree along with the data of a node, and then searches for the node in the tree and then provides the depth of the node where the given word is found.
* (iii) **getchildcount(struct node \*ptr)**: gets count of child of a node passed via argument.
* (iv) **nodedegree(struct node \*root,char \*inputstring):** this function takes input as the root the tree along with the data of a node, and then searches for the node in the tree and then provides the degree of the node where the given word is found.
* (v) **printDesc(struct node \*root):** traverses my tree and prints all the words under all categories combined and in descending order of their respective frequencies.
* (vi) **main()**: main driver function that helps the user make use of all the functionalities provided by the program.
* The input is checked against any exception, by using if and else to check for expected input.  
  If unexpected input is received, The program returns Invalid Input and exits.

**Execution Screenshots:**

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