

Assignment 2

For this assignment, we are asked to write a small program to read in the options (i.e. integer numbers) through the user from the input terminal (by typing in) and give corresponding automatic responses. We were required to write a few global functions and recall them through the `main` function to achieve the targeted goal.

To solve this problem, I first define the global variable:

```
using namespace std;  
string name;
```

Then I wrote three functions `printMenu()`, `promptUser()`, and `takeAction()`, respectively, having types of `void`, `int` and `bool`, following the instructions.

The `printMenu()` function is used for printing out the menu iteratively:

```
void printMenu()  
{  
    cout << " " << endl; cout << "MAIN MENU" << endl;  
    cout << "-----" << endl;  
    cout << "1) Enter name" << endl; cout << "2) Say Hello" << endl;  
    cout << "3) Say Goodbye" << endl; cout << "4) Quit" << endl;  
    cout << " " << endl; cout << "Enter Choice:";  
}
```

Then use the `promptUser()` function to take the input from the user in the terminal:

```
int promptUser()  
{  
    int choice = 0;  
    cin >> choice;  
    return choice;  
}
```

Then, the `switch` loop (same as in the last homework) was written in the `bool takeAction(int choice)` function. Both the mentioned above functions were then recalled in the `main` function as given in the homework instructions.

Every time the user opens the program, they will first read the menu through the menu function. Then their action will be recorded through the `promptUser` function, and based upon the corresponding output is decided through the `takeAction` function, in which the loops were also designed to keep iterating. This loop is enabled through self-calling the `keepGoing` function.

In this assignment, I gained a decent knowledge of how to write and call functions in C++. More specifically, by iterative taking input and giving corresponding output through carefully designed loops and calling global functions from the `main` function. These skills further enabled me to use functions in future endeavors of C++ coding.