While and Do Loops

1. While Loop

The keyword `while` is used to perform one or more statements many times and the number of times is not known beforehand. The test occurs at the beginning of the loop.

```cpp
int main () {
    int n=3;
    while (n != 0) {
        cout << "Enter a number (0 to end)? ";
        cin >> n;
    }
    cout << endl << "the END" << endl;
    return 0;
}
```

And here is the output:

Enter a number (0 to end)? 4
Enter a number (0 to end)? 3
Enter a number (0 to end)? 9
Enter a number (0 to end)? 0

the END

2. Do Loop

The keyword `do` is used to perform one or more statements many times and the number of times is not known beforehand. The test occurs at the end of the loop.

```cpp
int main () {
    int n;
    do{
        cout << "Enter a number (0 to end)? ";
        cin >> n;
    }while(n != 0);
    cout << endl << "the END" << endl;
    return 0;
}
```

3. Exercises (Problems with an asterisk are more difficult)

You need to use the WHILE loop in all of the following problems.

Repeat all of the problems in the For Loop document but use the While loop instead.