```
#include "Wav.h"
#include "ReadWav.h"
#include "Processor.h"
#include "Echo.h"
#include "noisegate.h"
#include "normalizer.h"
#include <iostream>
using namespace std;
int getMenuChoice();
int main (int argc, char* argv[])
{
    const char* filePath;
    string input;
    string newInputName;
    //string* wavFile;
    if (argc <= 1)
    {
        cout << "Input wave file name: ";</pre>
        cin >> input;
        cin.get();
        filePath = input.c_str();
    }
    else
    {
        filePath = argv[1];
        cout << "Pulled wave file name: " << filePath << endl;</pre>
    }
    FILE* wavFile = fopen(filePath, "r");
    if (wavFile == NULL)
    {
        cout << "Wav File name " << filePath << " does not exist: " << endl;</pre>
        return 1;
    }
    //wavFile = wavfile;
    Reader wav;
    //wav.ReadWav(filePath);
  int userChoice;
    do {
```

```
userChoice = getMenuChoice();
        switch(userChoice){
            case 0:
                return 0;
            case 1:
                Processor *processor1 = new Noisegate(.20);
                processor1->processBuffer(wav.getBuffer(),wav.getBufferSize());
                wav.writeFile("noise.wav");
      //call noisegate
                break;
            case 2:
                Processor *processor2 = new Echo(10);
                processor2->processBuffer(wav.getBuffer(),
                 wav.getBufferSize());
                break;
            case 3:
                Processor *processor3 = new Normalizer();
                processor3->processBuffer(wav.getBuffer(), wav.getBufferSize());
                break:
            case 4:
                Reader Reader (wavFile);
                cout << endl << "what would you like to name the new file, add</pre>
                 .wav: ";
                cin >> newInputName;
                wav.writeFile(newInputName);
      //export file
      //check name
                break;
            default:
                cout << "Please enter a valid option!\n";</pre>
    }
    } while (userChoice != 0);
    return 0;
}
int getMenuChoice(){
    int userChoice;
  cout<<"How would you like to modify the data?\n1. Noisegate\n2. Echo\n3.
   Normalizer\n4. Export and Save\n0. Quit";
  cin>> userChoice;
    return(userChoice);
}
```