

CODE:

```
#include <iostream>
#include <fstream>
#include <string>
using namespace std;

void saveToFile(const string& filename, const string& data);

void readFromFile(const string& fileName);

void createFeatureFile(string& fileName);

int main() {
    string fileName;
    int choice;

    while (true) {

        cout << "Menu: " << endl;
        cout << "1. Create a text file" << endl;
        cout << "2. Input features and label" << endl;
        cout << "3. Show features and label" << endl;
        cout << "4. Exit" << endl;
        cout << "Enter your choice (1-4): ";
        cin >> choice;

        switch (choice){
```

```
case 1: {

    cout << "Enter the name of the feature file (e.g., featureFile.txt): ";
    cin >> fileName;
    createFeatureFile(fileName);
    break;
}

case 2: {

    if (fileName.empty()) {

        cout << "No file available." << endl;
    }
    else {
        string data;
        cout << "Enter comma-separated training data. Press enter to get new data." <<
endl;
        cout << "Type 'exit' to exit." << endl;
        cin.ignore(); // To ignore leftover '\n' from previous input

        while (true) {

            cout << "Enter data: ";
            getline(cin, data);
            if (data == "exit") {

                break;
            }
            saveToFile(fileName, data);
        }
    }
}
```

```
        }

    }

    break;

}

case 3:{

    if (fileName.empty()){

        cout << "No file available." << endl;

    }

    else {

        readFromFile(fileName);

    }

    break;

}

case 4:{

    cout << "Exiting program." << endl;

    return 0;

}

default:{

    cout << "Invalid option. Please choose a number between 1 and 4." << endl;

}

}

}

}

}
```

```
void createFeatureFile(string& fileName) {  
    ofstream outFile(fileName, ios::out);  
    if (outFile) {  
        cout << "Feature file " << fileName << " created successfully." << endl;  
        outFile.close();  
    }  
    else {  
        cout << "Error creating file." << endl;  
    }  
}  
  
// Function to save data to a file  
  
void saveToFile(const string& filename, const string& data) {  
    ofstream outFile(filename, ios::app); // Open file in append mode  
    if (outFile) {  
        outFile << data << endl;  
        cout << "Data saved successfully." << endl;  
    }  
    else {  
        cout << "Error saving data." << endl;  
    }  
}  
  
// Function to read data from a file  
  
void readFile(const string& fileName) {  
    ifstream inFile(fileName);
```

```
if (inFile) {  
    string line;  
    while (getline(inFile, line)) {  
        cout << line << endl;  
    }  
    inFile.close();  
}  
  
else {  
    cout << "Error reading file." << endl;  
}  
}
```

Output Screenshot:

Microsoft Visual Studio Debug Console

Menu:

1. Create a text file
2. Input features and label
3. Show features and label
4. Exit

Enter your choice (1-4): 1

Enter the name of the feature file (e.g., featureFile.txt): InventoryFile.txt

Feature file InventoryFile.txt created successfully.

Menu:

1. Create a text file
2. Input features and label
3. Show features and label
4. Exit

Enter your choice (1-4): 2

Enter comma-separated training data. Press enter to get new data.

Type 'exit' to exit.

Enter data: Book, Pen, Board, Chair, Computer, Pencil, Projector, Notebook, Highlighter, Marker, Eraser Gum, Student Seat exit

Data saved successfully.

Enter data: exit

Menu:

1. Create a text file
2. Input features and label
3. Show features and label
4. Exit

Enter your choice (1-4): 3

Book, Pen, Board, Chair, Computer, Pencil, Projector, Notebook, Highlighter, Marker, Eraser Gum, Student Seat exit

Menu:

1. Create a text file
2. Input features and label
3. Show features and label
4. Exit

Enter your choice (1-4): 5

Invalid option. Please choose a number between 1 and 4.

Menu:

1. Create a text file
2. Input features and label
3. Show features and label
4. Exit

Enter your choice (1-4): 4

Exiting program.

C:\Users\Acer\source\repos\lab4\x64\Debug\lab4.exe (process 5384) exited with code 0 (0x0).

To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.

Press any key to close this window . . .