



THE  
**TEACHINATOR**



OUR  
GROUP



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# INTRODUCTION

"Teachinator" is a C++ program based on the concepts of "AKINATOR". Akinator is an online game and artificial intelligence program that gained popularity worldwide. Developed by French programmers in 2007, Akinator uses a series of questions to guess the fictional or real-life character a player is thinking of.

Akinator was Programmed in Phyton Language while Teachinator uses same concepts but is programmed in c++. Teachinator uses Console Input and Output.

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# CONCEPTS USED

1 File Handling

2 Console Text Attribute

3 Nested User-Defined Functions

4 Data Structures

5 Loops

# DRAWBACKS & LIMITATIONS

- 1 Dependency
  - 2 Limited Adaptability
  - 3 Contextual Understanding
- 

# FUTURE & FLEXIBILITY

- 1 Less Entities
  - 2 Secure Data
  - 3 Easy Modification
- • •

# HEADER FILES

1

**#include <iostream>**

2

**#include <fstream>**

3

**#include <string>**

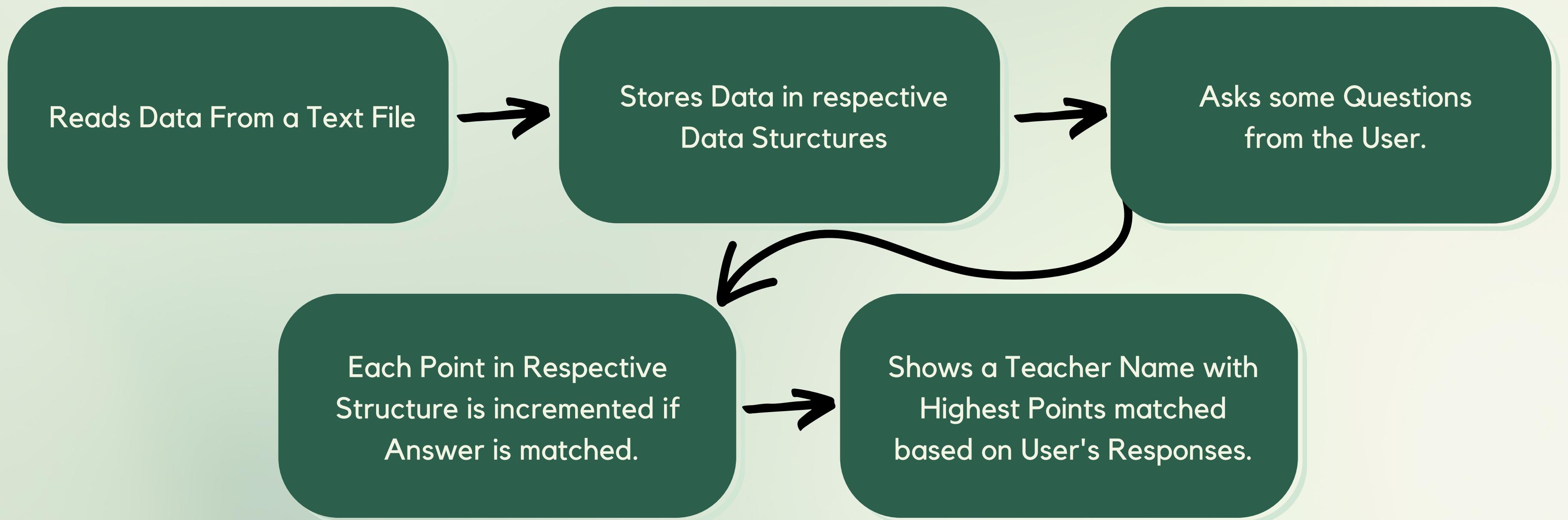
4

**#include <windows.h>**

5

**#include <iomanip>**

# FLOWCHART



# STRUCTURES

```
-struct Male_Teacher
{
    int Points = 0;
    string HairColor;
    string FacialHair;
    string Clothes;
    string Old;
};
```

*Structure used to Store Male Teachers Data*

```
-struct Female_Teacher
{
    int Points = 0;
    string Abaya;
    string Glasses;
    string Old;
};
```

*Structure used to Store Female Teachers Data*

# FILE HANDLING

Concepts of File Handling are used to read data from the file stored in drive.

```
void GetMaleDataFromFile(HANDLE h, Male_Teacher male[])
{
    int ctrl = 0;
    int size = 2;

    fstream f;
    f.open("C:\\\\Teachinator\\\\MaleData.txt", ios::in);

    if (f.is_open())
    {
        while (!f.eof() && ctrl < size)
        {
            f >> male[ctrl].HairColor;
            f >> male[ctrl].FacialHair;
            f >> male[ctrl].Clothes;
            f >> male[ctrl].Old;
            ctrl++;
        }
    }
    else
    {
        SetConsoleTextAttribute(h, 4);
        cout << "Error: File is Missing from Disk.\n\n";
        SetConsoleTextAttribute(h, 15);
    }
}
```

*Stores Data of Female Teachers*

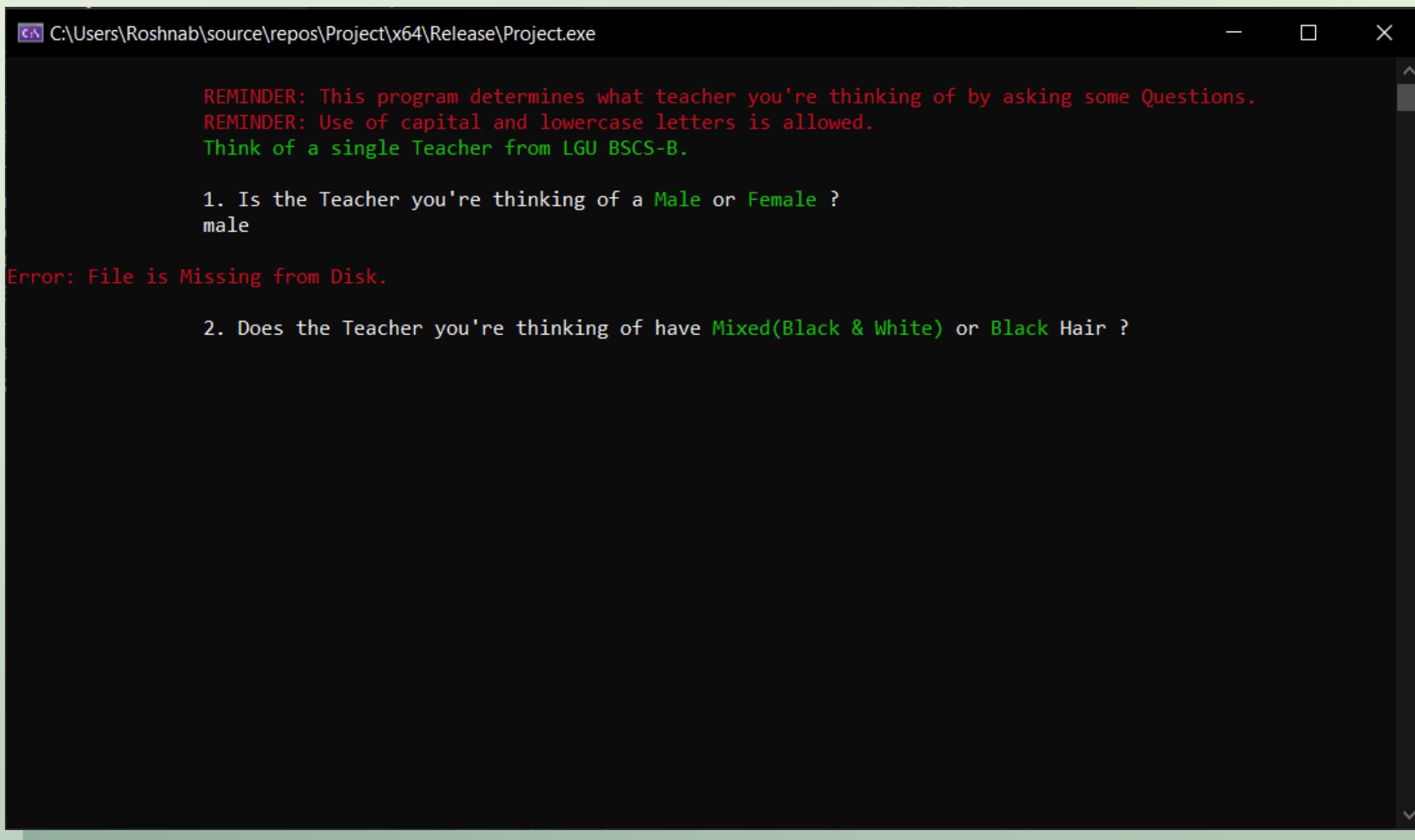
```
void GetFemaleDataFromFile(HANDLE h, Female_Teacher female[])
{
    int ctrl = 0;
    int size = 3;

    fstream f;
    f.open("C:\\\\Teachinator\\\\FemaleData.txt", ios::in);

    if (f.is_open())
    {
        while (!f.eof() && ctrl < size)
        {
            f >> female[ctrl].Abaya;
            f >> female[ctrl].Glasses;
            f >> female[ctrl].Old;
            ctrl++;
        }
    }
    else
    {
        SetConsoleTextAttribute(h, 4);
        cout << "Error: File is Missing from Disk.\n\n";
        SetConsoleTextAttribute(h, 15);
    }
}
```

*Stores Data of Male Teachers*

# WHAT IF FILE IS MISSING FROM DISK?

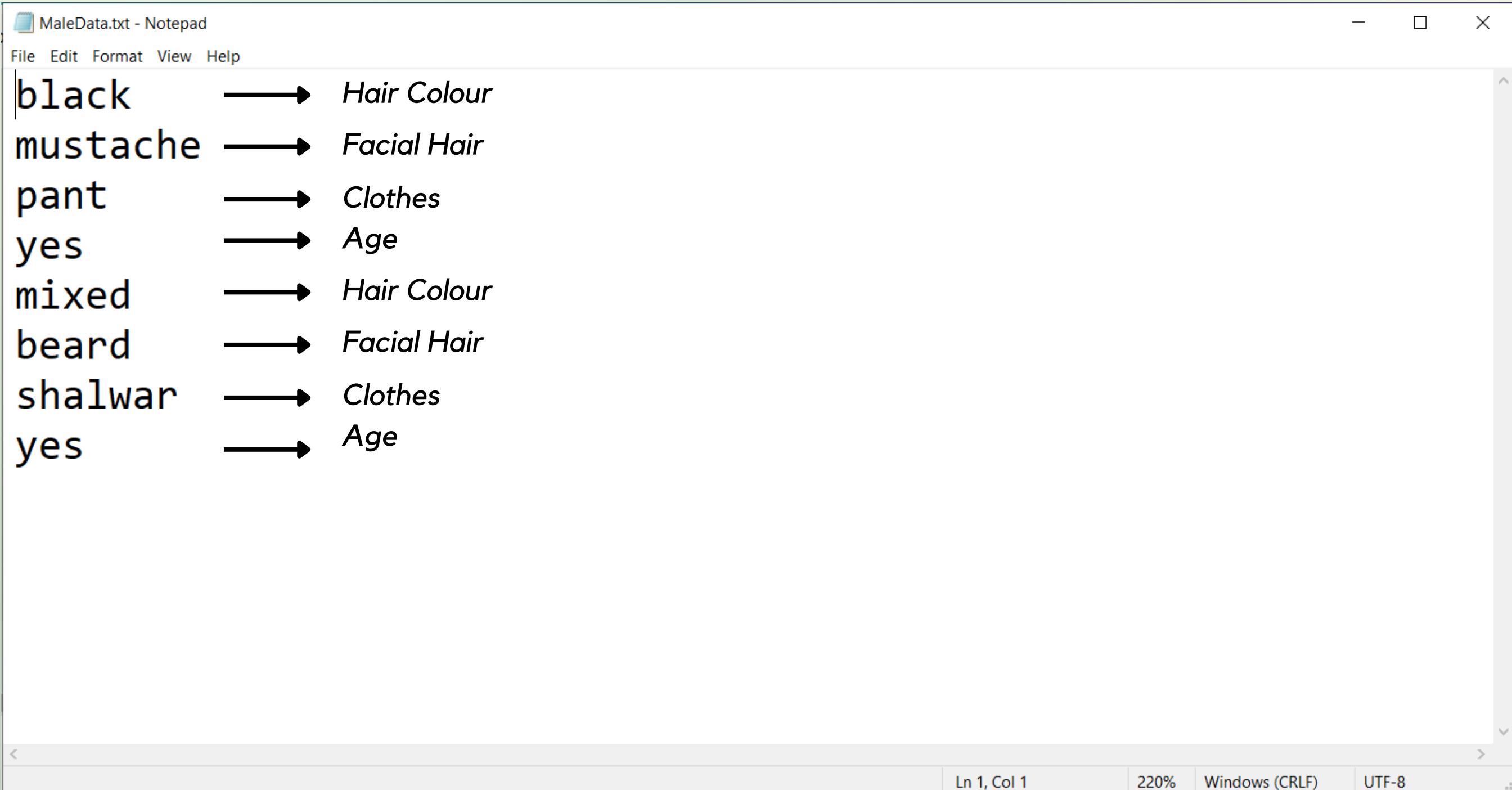


A screenshot of a terminal window titled "C:\Users\Roshnab\source\repos\Project\x64\Release\Project.exe". The window contains the following text:

```
REMINDER: This program determines what teacher you're thinking of by asking some Questions.  
REMINDER: Use of capital and lowercase letters is allowed.  
Think of a single Teacher from LGU BSCS-B.  
1. Is the Teacher you're thinking of a Male or Female ?  
male  
Error: File is Missing from Disk.  
2. Does the Teacher you're thinking of have Mixed(Black & White) or Black Hair ?
```

# TEXT FILES

Text file which contains the data of Male Teachers stored in Drive.



The screenshot shows a Notepad window titled "MaleData.txt - Notepad". The window displays the following data:

	→	
black	→	Hair Colour
mustache	→	Facial Hair
pant	→	Clothes
yes	→	Age
mixed	→	Hair Colour
beard	→	Facial Hair
shalwar	→	Clothes
yes	→	Age

Two curly braces on the left side group the data into two sections:

- A brace above the first four rows is labeled "Sir Arshad".
- A brace below the last four rows is labeled "Sir Irfanullah".

Notepad status bar details: Ln 1, Col 1 | 220% | Windows (CRLF) | UTF-8

# TEXT FILES

Text file which contains the data of Male Teachers stored in Drive.

FemaleData.txt - Notepad			
File Edit Format View Help			
Mam Batool	yes	→	Abaya
	yes	→	Glasses
	yes	→	Old
Mam Maria	yes	→	Abaya
	no	→	Glasses
	no	→	Old
Mam Kiran	no	→	Abaya
	no	→	Glasses
	yes	→	Old

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# FUNCTIONS USED

- Male functions

```
void Male(HANDLE h);
void GetMaleDataFromFile(HANDLE, struct Male_Teacher[]); // To get Data of all Male Teachers from a File and Store it in the Structure.
void Male_HairColor(struct Male_Teacher[]); // Asks Teacher's Hair Colour.
void Male_FacialHair(struct Male_Teacher[]); // Asks if Teacher have Facial Hair.
void Male_Clothes(struct Male_Teacher[]); // Asks what type of Clothes Teacher Wears.
void Male_Old(struct Male_Teacher[]); // Asks if Teacher is Old or Young.
void Output_Male(HANDLE h, struct Male_Teacher male[], int TotalMaleTeachers, int Male_Questions); // Shows Output of Male Teacher Guessed based on Answers.
```

- Female functions

```
void Female(HANDLE h);
void GetFemaleDataFromFile(HANDLE, struct Female_Teacher[]); //To get Data of all Female Teachers from a File and Store it in the Structure.
void Female_Abaya(HANDLE h, struct Female_Teacher[], int TotalFemaleTeachers); // Asks if Teacher wears Abaya.
void Female_Glasses(HANDLE h, struct Female_Teacher[], int TotalFemaleTeachers); // Ask if Teacher wears Glasses.
void Female_Old(HANDLE h, struct Female_Teacher[], int TotalFemaleTeachers); // Ask if Teacher is Old or Young.
void Output_Female(HANDLE h, struct Female_Teacher[], int TotalFemaleTeachers, int Female_Questions); // Shows Output of Female Teacher Guessed based on Answers.
```

ANYONE TO TRY  
**TEACHINATOR?**



