## a thorough description of the problem

## Implement a convertor which will convert Morse code to a character string.

application should initially set up the Morse tree below as a Binary Tree

Menu driven system (clear instructions) with the following functionality:

1. Load morse code from a file.

2. Play sounds effects of the inputted code

3. Convert and output the resulting character string onto the screen.

## a description of underlying data structures used to solve the problem (use diagrams to illustrate)

## 

## a copy of the code (language your choice)

## a description of all the functions/routines which have been used

function morseCodeTree() - function used to load the binary tree

function read(file) – function used to read text from a file

function translate(file) – function used to translate morse code into english language

unction convert(morse, treeLevel) – recursive function used to traverse morse code tree

## Test files used and sample execution screenshots of outputs produced during rigorous testing.

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## 3. A copy of the code and a release executable version is to be uploaded to OneDrive. Link tba

Test with each of these input files, from a possible 5 files. The contents of the files are below. A space separates the code for each character. A slash separates each word.

* **File 1**: - .... .. ... / - --- --- .-.. / .-- --- .-. -.- ...
* **File 2:** -- --- .-. ... . / -.-. --- -.. .
* **File 3:** ... --- ..-. - .-- .- .-. . / -.-- . .- .-. / - .... .-. . .
* **File 4:** .. - -.-. .- .-. .-.. --- .--
* **File 5:** -- .. -.-. .... .- .-..

2. Play sounds effects of the inputted code

3. Convert and output the resulting character string onto the screen.

Sample Marking Scheme:

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Report |  |  |  |  |  |  |  |  | Code |  |  |
| Presentation | Description problem | Data Structs Used | PseudoCode | Desc Functions | Code present | Test Data | Sample Exec | Amount Completed | Quality Code | GUI | Total |
| 5 | 1 | 8 | 12 | 4 | 1 | 1 | 6 | 3 | 7 | 2 | 50 |

Shape

Description automatically generated

Graphical user interface, text, application

Description automatically generated