Morse code decoder and analyser user document

1. Run all the cells.

2. After the sentence 'Enter your Morse Code sequence here:' appears, input your Morse Code sequence.

   Morse Code sequence should be entered by following rules:
   - Use * to separate each character (for example, 0000*00 will be decoded as: HI)
   - Use *** to separate word (for example, 0000*00***0000*111*011 will be decoded as: HI HOW)
   - Use *** before and after a punctuation (for example, 0000*00***110011***0000*111*011 will be decoded as: HI, HOW)

3. After inputting Morse Code sequence, run the program by pressing enter button or run button.

4. Morse Code sequence will then be decoded.

   After the decoded result, a menu will appear.

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Enter your Morse Code sequence here:000*00***110011***0000*111*011***01*010*0***1011*111*001*
**001100***00*11***110*111*111*100***010101
The morse code sequence is decoded to: SI , HOW ARE YOU ? IM GOOD .

                1.Character
                2.Word
                3.Sentence
                4.Exit

Please choose the analyse you want to perform [                              ]
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5. Users can choose their preferred analyser to analyse the number of occurrences for character, word or sentence by inputting the number of choices:1,2 or 3. Users can also choose to exit for this analyse by inputting 4.

6. If users choose 1 (character), then the occurrence of each character will be shown.

   If users input 2(word), then the occurrence of each word will be shown.

If users input 3 (sentence), then the occurrence of each type of English sentence will be shown.

Analyse can be done repeatedly until users input 4(exit); to terminate the analyse for this Morse code sequence.

After exiting the analyse, users can input a new Morse code sequence to decode again.

7. User can then input another Morse Code sequence and repeat step 2 to 5.

8. User can terminate the program by inputting 'theend!'.

Limitation/assumption:

1. Assumed all the input for Morse Code sequences are correct. If an invalid Morse code sequence is entered as an input, an error will occur.

2. Assumed the decoded Morse Code sequence is grammatically correct. Therefore, punctuations will not occur together, for example: ,.?

3. Assumed all the Morse code sequence for punctuation is separated by *** (I.e. space).

4. Assumed clause means the sentence before a comma; for example: HI, HOW ARE YOU?; only have one clause.

5. The program will not run and will ask for another input of Morse code sequence if input has less than three '*'. Program will run in either case: 0*0*0*0 or 0***0.