

Activity 15: Create a python program to implement Morse Code translator.

```
MORSE_CODE_DICT = {
    'A': '.-', 'B': '-...', 'C': '-.-.', 'D': '-..', 'E': '.', 'F': '..-',
    'G': '---.', 'H': '....', 'I': '...', 'J': '.---', 'K': '-.-', 'L': '..-.',
    'M': '---', 'N': '-.', 'O': '---', 'P': '.-.-', 'Q': '--.-', 'R': '.-',
    'S': '...', 'T': '-.', 'U': '..-', 'V': '...-', 'W': '-.---', 'X': '-.-.',
    'Y': '-.-.-', 'Z': '---.', '1': '.----', '2': '..---', '3': '...--',
    '4': '....-', '5': '.....', '6': '-....', '7': '--...', '8': '---..', '9': '----.',
    '0': '-----', ' ': '/'
```

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def text_to_morse(text):
    morse_code = ""
    for char in text.upper():
        if char in MORSE_CODE_DICT:
            morse_code += MORSE_CODE_DICT[char] + " "
        else:
            morse_code += char + " "
```

```
def morse_to_text(morse_code):
    morse_code = morse_code.split(' ')
    text = ""
    for code in morse_code:
        for key, value in MORSE_CODE_DICT.items():
            if code == value:
                text += key
    return text
```



```
def main():
    print("Morse Code Translator")
    choice = input("1. Text to morse code translation\n2. Morse  
code Translation\n Enter choice:")
    if choice == '1':
        input_text = input("Enter the text to translate to  
Morse code:")
        result = text_to_morse(input_text)
        print(f"Morse Code: {result}")
    elif choice == '2':
        input_morse = input("Enter the Morse Code to  
translate to text (use space between Morse code  
symbols):")
        result = morse_to_text(input_morse)
        print(f"Text: {result}")
    else:
        print("Invalid choice. Please enter '1' or '2'")
if __name__ == "__main__":
    main()
```

Morse Code Translator  
1. Text to morse code translation  
2. Morse to text Translation  
Enter choice: 1  
Enter the text to translate to Morse code: HELLO WORLD  
Morse Code: ..... / .....

Morse Code Translator  
1. Text to morse code translation  
2. Morse to text Translation  
Enter choice: 2  
Enter the Morse code to translate to text (use space between Morse code symbols)  
..... / .....  
Text: HELLO WORLD

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