

### **1. What are the most challenging aspect of the coursework task?**

Ans- I have got many challenges in this task. I need to give the user to choose between encode or decode and input to write the message from the user to convert. When input message needs to support both capitals or small letters. I have faced problems in spacing at encode function. Also, the program doesn't stop so I need to use the break function. I have faced a problem in spacing so I need to use the split function to separate words by spacing in the decode function. I have also faced a problem calling the function. The challenging part is the most challenging questions. An optional part, I have faced many problems in looping. When entering the file name the function cannot read my given .txt files. I have faced a problem checking the filename so, I use `os.path.exist(filename)` to check. . All above the most challenging aspect of mine is to convert morse to simple English letters.

### **2. How did you go about completing the task?**

Ans- At first, I insert the morse code. Then I make the intro function. In the get function, I give conditions using while and give input to choose encode or decode. Then I make the program to reverse the keyboard with values using the "for" loop for encoding purposes in encode and decode function. In encode function, I make the program to change an English message into a morse-code, and in the decode function, I make the program to convert morse-code to an English message. In encode message I store the code into a variable where one space should be maintained between every Morse code. Then, at last, I make the main function to print encode the message and decode the message with giving condition. For the challenge function, First I make the program to input filename and make the program to open given file to convert encode to decode or decode to encode.

### **3. What have you learned over the course of completing this coursework task?**

Ans- I have learned about python dictionaries. I also get knowledge of while looping and nested loop. I know to write code to support both uppercase and lower case letters in python. We should careful in spacing and indentation. We should use a split string to separate the words. I also know about call functions while doing this coding challenge. We should use the `open(filename)` function and `(readlines)` function while doing challenge functions. We need to know all the operators like `==`, `!=` etc. We need to use `os.path.exists(filename)` to check the file name which was given by users. I learned to input files in case of a message. From all above, mainly I learned about to convert English word to morse code and vice versa, also about dictionaries, looping condition, input file in case of the message, etc. At last, we should careful in indentation.