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Converting characters to unicode

C ANISH

Abstract—This is a document explaining conversion of characters from any language to its unicode value.

Download all python codes from

```
svn co https://github.com/chakki1234/
Winter_intern/tree/main/unicode_convert/
codes
```

A vedio explaining the process of converting characters to unicode can be found through the link

```
https://drive.google.com/file/d/12
mUmIff4A1HtfSadHmzFnooKPLU1wmDj/
view?usp=sharing
```

1 Solution

1.1. aigiri.txt contains a slokam in Telugu it is read and all the characters are stored to the variable *sloka_txt* with the help of the code below.

```
sloka = open('aigiri.txt', 'r')
sloka_txt = sloka.read()
sloka.close()
```

1.2. *sloka_txt* is a string containing all the words it is split into individual words and the list of words are saved to the variable *words*. A new file *unicode.txt* is opened to write the converted unicode.

```
words = sloka_txt.split()
uni_file = open('unicode.txt', 'w')
```

1.3. A for loop runs through all the words in the list and checks if the word is '|' or a number. If so it does not convert the word to its unicode value and proceeds with the next word. If the word is neither '|' nor a number, an other for loop is used to access each character of the word. Each character is then passed on to a function called ord() which returns the integer code point value of the character. The integer value is then converted to its hexadecimal value using the function hex(). The hexadecimal string contains the character 'x' which is replaced with

a null character to get the actual hexadecimal value it is then appedned to the string 'U+' and the resultant is written onto the txt file. The process is repeated for the remaining characters in the word and for all the remaining words.

```
for i in words:
    if(i !='|' and not(i.isdigit())):
    for j in i:
        uni_file.write('U+' +
        hex(ord(j)).replace('x', ''))
        uni_file.write('_')
uni_file.close()
```