

File Handling

Txt File

Unicode I

```
>>> nonlat="hai"
```

```
>>> nonlat.encode('utf-16')
```

```
b'\xff\xfeh\x00a\x00i\x00'
```

```
>>> nonlat.encode('utf-8')
```

```
b'hai'
```

```
>>> import os
```

```
>>> os.chdir("C:\\Users\\mahir\\Documents\\Python Presentation\\Basics I")
```

Get Unicode Error change the (\\) in the path to (\\) else (\\)

```
>>> os.chdir("C:/Users/mahir/Documents/Python Presentation/Basics I")
```

```
>>> with open('mahira.txt', 'wb') as f:
```

```
    f.write(nonlat.encode())
```

Reference link for Unicode

- <https://docs.python.org/3/howto/unicode.html>

Sys Module

- Import sys
- Help(sys)

File Handling mode

Mode	Description
'r'	This is the default mode. It Opens file for reading.
'w'	This Mode Opens file for writing. If file does not exist, it creates a new file. If file exists it truncates the file.
'a'	Open file in append mode. If file does not exist, it creates a new file.
't'	This is the default mode. It opens in text mode.
'b'	This opens in binary mode.
'+'	This will open a file for reading and writing

File Handling in Python

- The `open()` function is used to open files in our system, the filename is the name of the file to be opened.
- The mode indicates, how the file is going to be opened "r" for reading, "w" for writing and "a" for a appending.
- The open function takes two arguments, the name of the file and and the mode for which we would like to open the file.
- By default, when only the filename is passed, the open function opens the file in read mode.

Example

```
>>> fh = open("mahira.txt", "r")
```

```
>>> fh
```

```
<_io.TextIOWrapper name='mahira.txt' mode='r' encoding='cp1252'>
```

```
>>> print (fh.read())
```

```
hai
```

Example for write mode

```
fh = open("hello.txt","w")
```

```
fh.write("hai programming")
```

```
fh.close() # to close the IO function
```


Append in Python file handling

```
>>> fh = open("mahira.txt", "a")  
>>> fh.write("Hello World again")
```

Rename function

os.rename(current_file_name, new_file_name)

Example:

```
import os
```

```
# Rename a file from test1.txt to test2.txt
```

```
os.rename( "test1.txt", "test2.txt" )
```

Remove function

- You can use the `remove()` method to delete files by supplying the name of the file to be deleted as the argument.
- **Syntax**
 - `os.remove(file_name)`
- **Example**
 - `import os`
 - `# Delete file test2.txt`
 - `os.remove("text2.txt")`