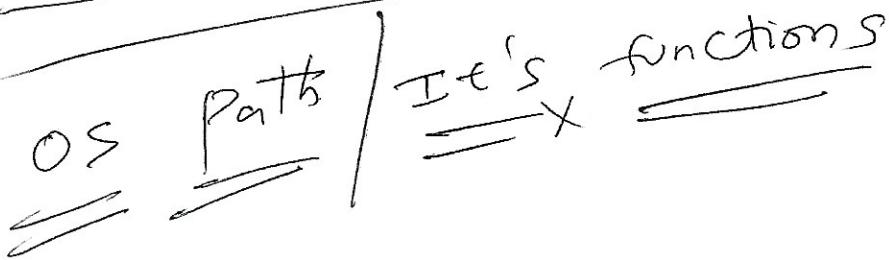


①

## OS module



os.path.exists  
os.path.isfile  
os.path.isdir

os.path.split()  
os.path.join()  
os.path

os.path.basename()  
os.path.dirname()

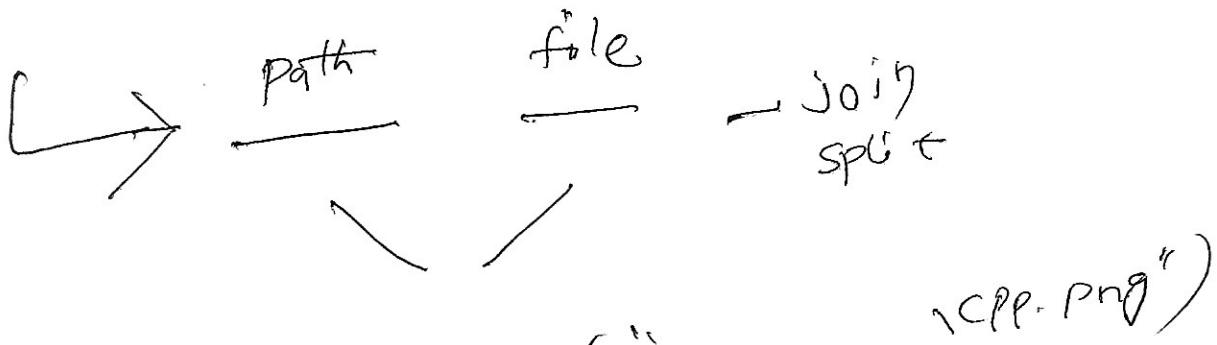
os.path.getmtime()  
os.path.getatime()

os.path.realpath()  
os.path.abspath()

↳ import os  
↳ mypython/child1/ CPP.Png

os.path.exists  
C:\mypython\child1\CPP.Png → True  
(child1)  
→ False

↳ `os.path.isfile`  
`('C:\My Python\Child1\CPP-Png')` → true  
→ `False`  
isdir (

↳   
path — file — join  
↓ ↓ split

↳ `os.path.split` ("  
`('C:\My Python\Child1\CPP-Png')`)

↳ `os.path.join`  
`('C:\My Python\Child1\CPP-Png')`

↳  
- basename  
`CPP-Png`  
- dirname  
`\Child1` ✓  
`C:\`

↳ `getmtime` → modify time

↳ `getatime` → access time  
`C:\My Python\Compress.py` epoch

↳ `time.ctime(os.path.getmtime  
('C:\`

(2)

↳ .getatime(),  
.getctime()

↳ relpath  
abspath

↳ C:\myProg\child1

C:\myPython  
└ child1  
  └ cwd  
  └ child2  
  └ sheep.png

↳ abs path  
↳ C:\myPython\child2\sheep.png  
↳ ..\child2\sheep.png  
↳ rel path

↳ os.chdir("C:\myPython\child1")

os.getcwd()

os.path.relpath("C:\sheep.png")

↳ os.path.relpath("C:\child2\sheep.png")

↳ os.path.abspath("C:\sheep.png") ✓

```
import os
import datetime
import time
path = "C:\MyPython\Child1\1.exe"
print(os.path.exists(path)) → True
print(os.path.isfile(path)) → True
print(os.path.isdir(path)) → False
print(os.path.split("C:\MyPython\Child1\1.exe"))
(C:\MyPython\Child1, "1.exe")
print(os.path.join("C:\MyPython\Child1", "1.exe"))
(C:\MyPython\Child1\1.exe)
os.path.basename(path) → 1.exe
os.path.dirname(path) → C:\MyPython\Child1
time.sleep(os.path.getmtime(path))
getctime(path)
setctime(path)
()
```



- ↳ os.name
- ↳ os.getlogin() C:\Windows
- ↳ os.getcwd()
- ↳ os.listdir()  
"C:\ABC"
- ↳ os.mkdir()  
os.makedirs()  
C:\Parent\Child  
C:\Parent\Child
- ↳ child.txt  
↳ files.txt
- ↳ os.remove() → file  
os.rmdir() → dir  
os.removedirs() → dirs
- ↳ os.rmdir('C:\ABC')  
os.removedirs('C:\GP\PC')
- ↳ os.rename('C:\Windows',  
'C:\User\Windows')  
cwd does not allow

Reading a CSV file X Text file

NotePad

EMPID, Name, Salary  
E101, Promod, 120000  
E120, Dinesh, 12222  
E205, Sobets, 150000  
E331, Helly, 120000  
E421, Avinash, 130000  
E231, Joy, 230000  
E222, Smith, 210000  
E150, Dilip, 19000

B  
C

import csv  
fp = open("C:\\12.csv", "r")  
CSV\_reader = csv.reader(fp)  
next(CSV\_reader)  
sd = []  
for i in CSV\_reader:  
 sd.append(int(i[2]))

pe(sd)  
pt(min(sd))  
pt(max(sd)) ✓

Reading

Dict from

{empid: 101, 'name': 'Paramod', 'salary': 120000}

```
import csv  
f = open("...")  
rdr = CSV.DictReader(f)  
for row in rdr:  
    pt(row)
```

f.close()

↳ {key: dict}  
↳ 'AVinosh': {empid: 'e42', 'name': 'Ragh',  
 'salary': 110000}

↳ emp = {}

for row in rdr:

emp[row] = row

row[dict] - row[name] = row

pt('Helen', emp['Helen'])

↳ ppaint-pprint (em ps)  
import pprint ✓

4

5

import CSV  
import pprint

fp = open('')

emp = []

for i in rdr:  
 emp[i['index']] = i

pprint.pprint(emp)

83 : { 'country': 'micronesia',  
 'desc': 'customer' }

↳ creating CSV file using writer

↳ CSV ~~X~~ write

`CSV.writerow( )`  
 `.writerow( )`

SV.WN.  
written now ( )  
Covid = ('country', 'Doses', 'People', 'percentage'),  
[(('India', '186Cr', '84.1Cr', '61'),  
('China', '330Cr', '124Cr', '88.1'),  
('United', '56.8Cr', '21.9Cr', '66.4'),  
('Brazil', '42.4Cr', '16.2Cr', '76.4')]]

```
import csv  
f = open('covid.csv', 'w')  
writer = csv.writer(f)  
for t in covid:  
    writer.writerow(t)  
f.close()
```

(6)

~~CSV Dict writer~~

↳ CSV.DictWriter(f, fields)

writerow

write header()

import CSV

covid = [ { 'country': 'India', 'Does': '186cr',  
 'people': '84.1cr',  
 'percentage': '61%' } ]

}

{

f = open("C:/NNREDDY/Desktop/covid.csv", "w", newline="")

fields = [ 'country', 'Does', 'people', 'percentage' ]

writer = CSV.DictWriter(f, fields)

writer.writeheader()

for i in covid:

writer.writerow(i)

f.close()

