```python
with open("./glo/borrowed.txt", "r") as f:
    files = f.readlines()
```

```python
import math

def loan_emi(amount, duration, rate, down_payment=0):
    loan_amount = amount - down_payment
    try:
        emi = loan_amount * rate * ((1 + rate) ** duration) / (((1 + rate) ** dur
    except zerodivisionerror:
        emi = loan_amount / duration
    emi = math.ceil(emi)
    return emi
```

```python
print(files)
```

```python
files
```

```python
files[3].strip().split(",")
```

```python
def parse_header(head):
    return head.strip().split(",")
```

```python
header = parse_header(files[1])
```

```python
header
```

```python
def parse_data(data):
    value = []
    for item in data.strip().split(","):
        if item == "":
            value.append(0.0)
        else:
            value.append(float(item))
    return value
```

```python
value = parse_data(files[1])
```

```python
value
```

```python
def create_dictionary(value, header):
    result = {}
    for valu, head in zip(value, header):
        result[head] = valu
    return result
```

```python
create_dictionary(value, header)
```

```python
def read_csv(path):
    result = []
    with open(path, "r") as f:
        files = f.readlines()
        header = parse_header(files[0])
        for data in files[1:]:
            value = parse_data(data)
            item_dict = create_dictionary(value, header)
            result.append(item_dict)
    return result
```

```python
read_csv("./glo/borrowed.txt")
```

```python
the_loan = read_csv("./glo/borrowed.txt")
```

```python
for loan in the_loan:
    loan["emi"] = loan_emi(loan["amount"],
                           loan["duration"],
                           loan["rate"] / 12,
                           loan["down_payment"])
```

```python
import math

def loan_emi(amount, duration, rate, down_payment=0):
    loan_amount = amount - down_payment
    try:
        emi = loan_amount * rate * ((1 + rate) ** duration) / (((1 + rate) ** dur
    except zerodivisionerror:
        emi = loan_amount / duration
    emi = math.ceil(emi)
    return emi
```

```python
the_loan
```

```python

```

```python
the_loan
```

```python
with open("./glo/borrower.txt", "w") as f:
    for the_loans in the_loan:
        f.write("{}, {}, {}, {}, {}\n".format(
            the_loans["amount"],
            the_loans["duration"],
            the_loans["rate"],
            the_loans["down_payment"],
            the_loans["emi"]))
```

```python
import os
os.listdir("./glo")
```

```python
headings = list(the_loan[0].keys())
```

```python
headings
```

```python
def write_csv(items, path):
    with open(path, "w") as f:
        if len(items) == 0:
            return
        headers = list(items[0].keys())
        f.write(",".join(headers) + "\n")
        for item in items:
            values = []
            for header in headers:
                values.append(str(item.get(header, "")))
            f.write(",".join(values) + "\n")
```

```python
write_csv(the_loan, "./glo/final_txt")
```

```python
with open("./glo/final_txt", "r") as m:
    print(m.read())
```

In [77]:
```python
def tail(filename, n=7):
    with open(filename, "r") as f:
        lines = f.readlines()
        for line in lines[-n]:
            print(line)
```

In [78]:
```python
tail("./glo/covid.txt", n=7)
```

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s

In [65]:
```python
food = ["rice", "beans", "yam", "garri", "amala"]
print(food)
```

['rice', 'beans', 'yam', 'garri', 'amala']

In [80]:
```python
slice = food[len(food)-5:]
print(slice)
```

['rice', 'beans', 'yam', 'garri', 'amala']

In [73]:
```python
print(len(food))
```

5

In [174]:
```python
import re

"""
Content of "log.txt":
10.1.2.1 - car [01/Mar/2022:13:05:05 +0900] "GET /python HTTP/1.0" 200 2222
10.1.1.9 - bike [01/Mar/2022:13:05:10 +0900] "GET /python HTTP/1.0" 200 2222

Expected output:
01/Mar/2022:13:05:05 +0900
01/Mar/2022:13:05:10 +0900
"""

def parse1():
    for line in open("./glo/log.txt"):
        print(line.split("[")[1].split("]")[0])

def parse2():
    for line in open("./glo/log.txt", "r"):
        print(line.split()[3].strip("[]"))

def parse3():
    for line in open("./glo/log.txt", "r"):
        print(" ".join(line.split("[" or "]")[3:5]))

def parse4():
    for line in open("./glo/log.txt", "rw"):
        print(" ".join(line.split()[3:5]).strip("[]"))

def parse5():
    for line in open("./glo/log.txt"):
        print(re.split("\[|\]", line)[1])
```

In [183]:
```python
def parse5():
    for line in open("./glo/log.txt"):
        print(re.split("\[|\]", line)[1])
```

In [184]:
```python
parse5()
```

```
06/Mar/2022:13:05:05 +0900
06/Mar/2022:13:05:10 +0900
```

In [133]:
```python
with open("./glo/log.txt", "r") as f:
    lines = f.readlines()
```

In [197]:
```python
lines[0]re.split("\[|\]")[1]
```

```
  File "C:\Users\ENR RILWAN\AppData\Local\Temp\ipykernel_6408\3494945955.py", l
ine 1
    lines[0]re.split("\[|\]")[1]
            ^
SyntaxError: invalid syntax
```

In [135]: `lines`

Out[135]: `['10.1.2.1 - car [06/Mar/2022:13:05:05 +0900] "GET /python HTTP/1.0" 200 2222`
`\n',`
`'10.1.1.9 - bike [06/Mar/2022:13:05:10 +0900] "GET /python HTTP/1.0" 200 222`
`2']`

In [166]: `lines[0].split()[3].strip("[]")`

Out[166]: `'06/Mar/2022:13:05:05'`

In [181]:
```
txt = "apple#banana#cherry#orange"

x = txt.split("#")

print(x)
```
`['apple', 'banana', 'cherry', 'orange']`

In [ ]:

In [189]:
```
import re

txt = "The rain in Spain"
x = re.split("\s", txt)
print(x)
```
`['The', 'rain', 'in', 'Spain']`

In [188]:
```
print(x)import re

txt = "The rain in Spain"
x = text.split("\s", txt)
print(x)
```
`<re.Match object; span=(0, 17), match='The rain in Spain'>`

In [190]:
```
import re

txt = "The rain in Spain"
x = re.search("\s", txt)

print("The first white-space character is located in position:", x.start())
```
`The first white-space character is located in position: 3`

In [191]:
```
def parse1():
    for line in open("./glo/log.txt"):
        print(line.split("\s"))
```

In [192]:
```python
parse1()
```

```
['10.1.2.1 - car [06/Mar/2022:13:05:05 +0900] "GET /python HTTP/1.0" 200 2222
\n']
['10.1.1.9 - bike [06/Mar/2022:13:05:10 +0900] "GET /python HTTP/1.0" 200 222
2']
```

In [ ]:

In [1]:
```python
name = ("abc")
list(name)
```

Out[1]:
```
['a', 'b', 'c']
```

In [2]:
```python
list(enumerate(name))
```

Out[2]:
```
[(0, 'a'), (1, 'b'), (2, 'c')]
```

In [3]:
```python
light = ["a", "b", "c"]
list(enumerate(light))
```

Out[3]:
```
[(0, 'a'), (1, 'b'), (2, 'c')]
```

In [ ]: