

Time Module

March 5, 2023

1 Import the time Module

```
[1]: import time
```

```
[2]: # Unix epoch timestamp  
# 1 Jan 1970 00:00:00  
  
# current_date_time -> 5.3.2023 12:44
```

2 time function

```
[3]: time.time()
```

```
[3]: 1678035674.0224128
```

```
[4]: start_time = time.time()  
print(f'start_time={start_time}')  
  
f = 1  
for i in range(1, 100_000):  
    f *= i  
  
end_time = time.time()  
print(f'end_time={end_time}')  
  
# print(f)  
print(end_time - start_time, 'secs')
```

```
start_time=1678035674.059402  
end_time=1678035678.2550542  
4.19565224647522 secs
```

3 ctime function

```
[5]: time.ctime()
```

```
[5]: 'Sun Mar  5 22:31:18 2023'
```

```
[6]: time.ctime(0)
```

```
#      0      +      0      =      return date and time
# epoc timestamp      secs
```

```
[6]: 'Thu Jan  1 05:30:00 1970'
```

```
[7]: time.time()
```

```
[7]: 1678035678.325032
```

```
[8]: time.ctime(1678001077)
```

```
[8]: 'Sun Mar  5 12:54:37 2023'
```

```
[9]: time.ctime(24*60*60)
```

```
#      0      +      24 * 60 * 60      =      2 Jan 1970 5:30:00
# epoc timestamp      secs
```

```
[9]: 'Fri Jan  2 05:30:00 1970'
```

4 sleep function

```
[10]: for i in range(1, 6):
      print(i)
      time.sleep(1)
```

```
1
2
3
4
5
```

```
[11]: start_time = time.time()
      print(f'start_time={round(start_time, 2)} secs')

      f = 1
      for i in range(1, 100_000):
          f *= i
```

```

end_time = time.time()
print(f'end_time={round(end_time, 2)} secs')

# print(f)
print(round(end_time - start_time, 2), 'secs')

```

```

start_time=1678035683.46 secs
end_time=1678035687.23 secs
3.77 secs

```

```
[12]: time.ctime(0)
```

```
[12]: 'Thu Jan  1 05:30:00 1970'
```

```
[13]: time.ctime()
```

```
[13]: 'Sun Mar  5 22:31:27 2023'
```

```
[14]: time.ctime(time.time())
```

```
[14]: 'Sun Mar  5 22:31:27 2023'
```

```
[15]: time.ctime(time.time()) - time.ctime(0)
```

```

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TypeError                                Traceback (most recent call last)
Input In [15], in <cell line: 1>()
----> 1 time.ctime(time.time()) - time.ctime(0)

TypeError: unsupported operand type(s) for -: 'str' and 'str'

```

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