

python script (self-usecase) :-

Q) Renaming multiple files in directory by adding prefix/suffix :-

```
import os
```

```
directory = input()
```

```
prefix = input()
```

```
suffix = input()
```

```
for file in os.listdir(directory) :
```

```
    oldpath = os.path.join(directory, file)
```

```
    filen, ext = os.path.split(oldpath)
```

```
    suffix = f'{prefix}{filen}{suffix}{ext}'
```

```
    new_file = f'{prefix}{filen}{suffix}{ext}'
```

```
    new_path = os.path.join(directory, new_file)
```

```
    os.rename(oldpath, new_path)
```

) Monitor CPU & memory usage whether exceeding threshold or not :-

```
import psutil
```

```
CPU_THRESHOLD = 50
```

```
MEMORY_THRESHOLD = 50
```

```
CPU = psutil.cpu_percent(interval=1)
```

```
memory = psutil.memory_percent
```

```
if CPU > CPU_THRESHOLD :
```

```
    print("CPU exceeded threshold")
```

```
if memory > MEMORY_THRESHOLD :
```

```
    print("Memory exceeded threshold")
```

Hackathon scripts :-

- 1) CPU usage, Memory usage, Disk usage, Top processes and Active network connection :-

`#!/bin/bash`

`top -bn1 | grep cpu(s) # CPU usage`

`free -h # Memory usage`

`df -h # Disk usage`

read total usage free
=> (free -h)

- 2) Exceeding threshold usage