

Python Scripts (self-use case) :-

1) 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.splitext(oldpath)
    new_file = f"{prefix}{filen}{suffix}{ext}"
    new_path = os.path.join(directory, new_file)
```

2) 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_values().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