

## Using socat in Linux for creating VMs

### I. To make VM using socat

To know the serial ports in Linux machine

```
dmesg | grep tty
```

To create VMs in Linux

```
socat -d -d pty, raw, echo=0 pty, raw, echo=0
```

open new terminal and use

```
cat </dev/pts/4 (this may be different in your machine)
```

open another terminal and use

```
echo "test string" > /dev/pts/7 (this may be different in your machine)
```

### II. BASH script for streaming data

Make a separate directory for BASH code. Write a function using the below code save in file with .sh file extension.

```
#!/bin/bash
```

```
while true
do
echo $(( $RANDOM%100 ))
sleep 1
done
```

### III. Use socat for streaming

Use the above BASH file to make numerical simulations.

```
socat -d -d pty,raw,echo=0
"exec:/media/hi/C2ACA28AACA278951/Windows/work/bash_scripts/random
Sim.sh ...,pty,raw,echo=0"
```

Twist your BASH file to create functions for few Discrete and Continuous probability functions.