Lab program 1. :-

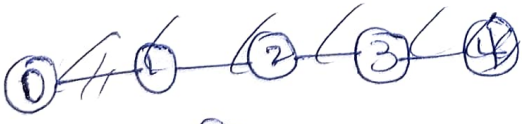
Bus topology :-

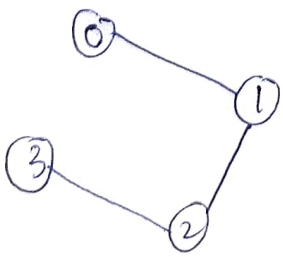
```
Set ns [new Simulator]
set f [open out.nam w]
$ns namtrace-all $f
proc finish { } {
global ns f
$ns namtrace-all $f
close $f
exec nam out.nam &
exit 0
}

Set n0 [$ns node]
Set n1 [$ns node]
Set n2 [$ns node]
Set n3 [$ns node]
$ns duplex-links $n0 $n1 1mb 10ms DropTail
$ns duplex-links $n1 $n2 1mb 10ms DropTail
$ns duplex-links $n2 $n3 1mb 10ms DropTail
$ns at 5.0 "finish"
$ns run
```

O/P:-

1) BUS topology :-

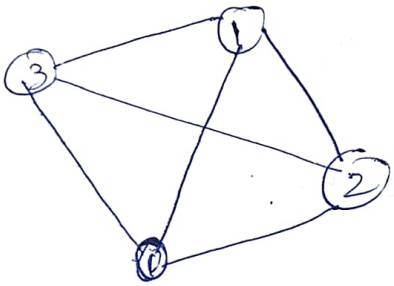




mesh topology

```
set n0 [$ns node]
set n1 [$ns node]
set n2 [$ns node]
set n3 [$ns node]

$ns duplex-links $n0 $n1 1mb 10ms DropTail
$ns duplex-links $n1 $n2 1mb 10ms DropTail
$ns duplex-links $n2 $n3 1mb 10ms DropTail
$ns duplex-links $n0 $n2 1mb 10ms DropTail
$ns duplex-links $n1 $n3 1mb 10ms DropTail
$ns duplex-links $n0 $n3 1mb 10ms DropTail
```



ring-topology

```
set n0 [$ns node]
set n1 [$ns node]
set n2 [$ns node]
set n3 [$ns node]
set n4 [$ns node]

$ns duplex-links $n0 $n1 1mb 10ms DropTail
$ns duplex-links $n1 $n2 1mb 10ms DropTail
$ns duplex-links $n2 $n3 1mb 10ms DropTail
$ns duplex-links $n3 $n4 1mb 10ms DropTail
$ns duplex-links $n4 $n0 1mb 10ms DropTail
```

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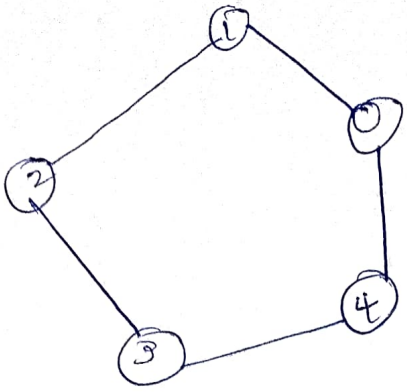
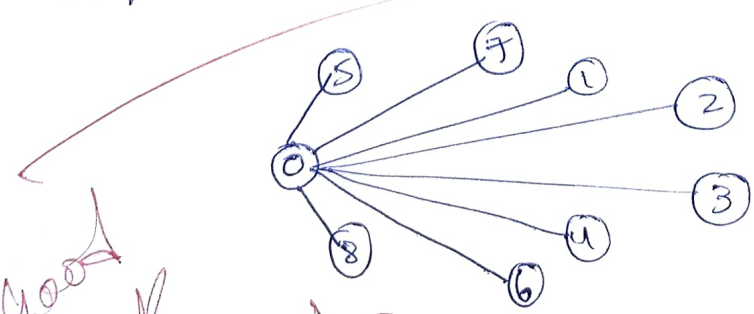


Start! — → continue after exit 0

```
set n0 [$ns node]
set n1 [$ns node]
set n2 [$ns node]
set n3 [$ns node]
set n4 [$ns node]
set n5 [$ns node]
set n6 [$ns node]
set n7 [$ns node]
set n8 [$ns node]
```

```
$ns duplex-link $n0 $n1 1mb 10ms DropTail
$ns duplex-link $n0 $n2 1mb 10ms DropTail
$ns duplex-link $n0 $n3 1mb 10ms DropTail
$ns duplex-link $n0 $n4 1mb 10ms DropTail
$ns duplex-link $n0 $n5 1mb 10ms DropTail
$ns duplex-link $n0 $n6 1mb 10ms DropTail
$ns duplex-link $n0 $n7 1mb 10ms DropTail
$ns duplex-link $n0 $n8 1mb 10ms DropTail
```



good

05/12/23