

Install the following libraries:

```
sudo apt install build-essential autoconf automake libxmu-dev
```

To install gcc-4.8 and g++-4.8

open the file:

```
sudo nano/gedit /etc/apt/sources.list
```

Include the following line

```
deb http://in.archive.ubuntu.com/ubuntu bionic main universe
```

```
sudo apt update
```

```
sudo apt install gcc-4.8 g++-4.8
```

Unzip the ns2 packages to home folder

```
tar zxvf ns-allinone-2.35.tar.gz
```

```
go to ns-allinone-2.35/ns-2.35
```

```
$cd ns-allinone-2.35/ns-2.35
```

Modify CC and CPP to @CC@ to gcc-4.8 and @CXX@ to g++-4.8 int the following files.

```
~ns-2.35/Makefile.in
```

```
~nam-1.15/Makefile.in
```

```
~xgraph-12.2/Makefile.in
```

```
~otcl-1.14/Makefile.in
```

open the file:

```
~ns-2.35/linkstate/ls.h
```

Modify the code at the Line no 137

```
void eraseAll() { erase(baseMap::begin(), baseMap::end()); }
```

To

```
void eraseAll() { this->erase(baseMap::begin(), baseMap::end()); }
```

Open a new terminal

```
$cd ns-allinone-2.35/
```

```
$ ./install
```

After Installation Set the PATH

Open a new Terminal,

```
$ gedit .bashrc
```

Paste the following lines

```
export PATH=$PATH:/home/<yourusername>/ns-allinone-2.35/bin:/home/<yourusername>/  
ns-allinone-2.35/tcl8.5.10/unix:/home/<yourusername>/ns-allinone-2.35/tk8.5.10/unix
```

```
export LD_LIBRARY_PATH=/home/<yourusername>/ns-allinone-2.35/otcl-1.14:/home/  
<yourusername>/ns-allinone-2.35/lib
```

Logout and login back or
\$ source .bashrc

now check if ns2 is working
\$ns
\$nam
\$xgraph

In case if the xgraph was not working do th following:

download xgraph from google drive
Extract the file
Run command sudo cp xgraph /bin/xgraph
After this now type sudo chmod 777 /bin/xgraph