Installation Instructions and Tips

1 Burning the .hex File:

- Connect the Arduino Nano to your computer.

- Run the following command to identify the port to which it has been connected.

```
ls /dev/ttyUSB*
```

    Assuming the output of this command is */dev/ttyUSB0*, this will be the port you enter in the following command.

- Go the Hex File location. Open a terminal in that location and type the following command to burn the .hex file. Alternatively you may specify the full path from any other location as well.

```
avrdude -p m328p -b 57600 -P /dev/ttyUSB0 -c stk500v1 -U flash:w:sr_beacons.hex:i
```

2 Installation:

2.1 ROS Serial Package:

- Install the package by typing the following command:

```
sudo apt install ros-kinetic-rosserial
```

2.2 Latest AVRDUDE package:

If you are facing problems in burning the hex file (It only checks the fuses/Reads and does not write for instance), follow the steps below, they will likely solve your error.

1. Check the version of AVRDUDE first before proceeding with the following steps. To do so run:

```
avrdude -v
```

    If the installed version is not 6.3 then proceed with installing the latest package. Else, skip this part.

2. Remove the previous version:

```
sudo apt remove avrdude
```

3. Add the source address.

```
sudo add-apt-repository ppa:ubuntuhandbook1/apps
```

4. Update:

```
sudo apt update
```

5. Install latest AVRDUDE package:

```
sudo apt-get install avrdude avrdude-doc
```

NOTE: Reference taken from the following Link.