0426To ensure that we have a clean environment, I have created another virtual machine. The installation of srsRAN binary and required libraries is the same.
In this part, I decided to use UHD as a driver to implement the connection between my laptop and the USRP device.

User Manual of srsRAN:
srsRAN

User Manuals of UHD:
USRP Hardware Driver and USRP Manual: Table Of Contents

Installation of UHD:
First, we should get the package of UHD with the following scripts:

```
sudo add-apt-repository ppa:ettusresearch/uhd
sudo apt-get update
sudo apt-get install libuhd4.1.0 uhd-host
```

Then we should get the required libraries:

```
sudo apt-get install autoconf automake build-essential ccache cmake
cpufrequtils doxygen ethtool \
g++ git inetutils-tools libboost-all-dev libncurses5 libncurses5-dev
libusb-1.0-0 libusb-1.0-0-dev \
libusb-dev python3-dev python3-mako python3-numpy python3-requests
python3-scipy python3-setuptools \
python3-ruamel.yaml
```

Then we should build and install UHD from the source code:

```
git clone https://github.com/EttusResearch/uhd.git
cd uhd/host
mkdir build
cd build
cmake ../
make
make test # This step is optional
sudo make install
sudo ldconfig
```

Error: Environment Error

```
uhd_usrp_probe
```

```
[INFO] [UHD] linux; GNU C++ version 9.3.0; Boost_107100; UHD_4.1.0.4-release
[WARNING] [B200] EnvironmentError: IOError: Could not find path for image:
usrp_b200_fw.hex

Using images directory: <no images directory located>

Set the environment variable 'UHD_IMAGES_DIR' appropriately or follow the below
instructions to download the images package.

Please run:

  "/lib/x86_64-Linux-gnu/uhd/utils/uhd_images_downloader.py"
Error: LookupError: KeyError: No devices found for ----->
Empty Device Address
```

Solution: We can solve this question by changing the environmental variable
UHD_IMAGES_DIR.

```
export UHD_IMAGES_DIR=/usr/local/share/uhd/images
```

Error: The Driver cannot recognise the device. The name of the device become Ettus Unknown
(from Ettus WestBridge)