***Plan***

***1. Scriptwise***

**To do :**

1. Install Atom

2. Start using Jupyter

3. Use virtual environment for requirements list

4. Start using Pandas

5. Install Slack

**Implementations:**

* modulewise
* scriptwise(subsets)

**In pyraf**

* Photometry
* Spectroscopy – high and low resolution
* Data Analysis- results from IRAF in a presentable format
* Plotting

**Format of the code: ( follow avinash’s mail on 1st march 2017)**

* Main Heading of the script – 3 comment lines
* Comment till 119 characters # and space
* Subheading – section headings has line, description and line
* import module always on the top
* All the global variables/ user input variables keep it at the top
* Write functions in different subsets – ex: IRAF tasks, File handling

**Ideas and Implementation:**

**High Resolution:**

**0. Giving global variables – read noise etc**

**1. Preprocessing:**

* hedit the headers
* trim
* bias subtraction
* Flat fielding

2**. Extraction of the spectrum**

**3. Wavelength Calibration,dispersion correction,**

**4. Final corrections: Redshift correction, heliocentric correction etc**

**Low Resolution:**

**1. Preprocessing:**

* hedit the headers
* trim
* bias subtraction
* cosmic ray correction

2**. Extraction of the spectrum**

**3. Wavelength Calibration,dispersion correction,**

**4. Flux Calibration, continuum calibrations**

**Photometry:**

**1. Preprocessing:**

* hedit the headers
* trim
* bias subtraction
* cosmic ray correction

**2. Photometry.py**

**3. Calculate Airmass**

**4. Combine frames**

**5. Align frames**

**Observation planning:**

**Deadlines:**

**1. Avinash: Photometry pipeline: make the code simple and short. Dont complicate.**

**2. Sireesha: Change the format for pre processing script. - 15th March 2017.**