

# 1920\_assignment

October 9, 2019

```
In [3]: import pandas as pd
import numpy as np

import scipy.stats as stats
from scipy.optimize import curve_fit

import matplotlib.pyplot as plt

from astropy import constants as const
from astropy import units as u
from astropy.io import fits

import os

#from IPython.display import Latex
```

## 1 Assignment 19/20

### 1.1 Question 1

a) 5 Marks

```
In [4]: # Read in data with pandas and show first 5 rows
filename='/Users/richardmorton/Desktop/teaching/astro_IDL/IDL_assign/2019/planets.csv'
df=pd.read_csv(filename,skiprows=78)
df.head(5)
```

```
Out[4]:
```

	pl_hostname	pl_letter	pl_name	pl_discmethod	pl_pnum	pl_orbper \
0	11 Com	b	11 Com b	Radial Velocity	1	326.03000
1	11 UMi	b	11 UMi b	Radial Velocity	1	516.21997
2	14 And	b	14 And b	Radial Velocity	1	185.84000
3	14 Her	b	14 Her b	Radial Velocity	1	1773.40002
4	16 Cyg B	b	16 Cyg B b	Radial Velocity	1	798.50000

  

	pl_orbpererr1	pl_orbpererr2	pl_orbperlim	pl_orbsmax	...	\
0	0.32	-0.32	0.0	1.29	...	
1	3.20	-3.20	0.0	1.53	...	