

An engineering institute faced the unique problem during an current academic semester due to corona pandemic. Before the lockdown has been applied to entire city only few component are evaluate by the faculty member. This details are shaved in the CSV file. The csv file is share along with this question with you. Normally to pass any course in one semester, student need to perform good in 3 component and those are continuous evaluation(CE), Lab work (LPW) and University exam (SEE).

To pass the subjects students required give exams in three components. The weightage of each component is mention in below table.

	CE Component	LPW Component	SEE Component	Total	Remarks
To clear the subject	40 marks	20 Marks	40 Marks	100 marks.	Minimum 40% marks in each component t mandatory

Bifurcation of CE component:

	Class Test	Sessional	Innovative Assignment	Total	Constrains to clear the CE component
Marks	30	40	30	100	Minimum 40% of marks is mandatory to clear the CE component

Bifurcation of LPW Component: total 10 practical, each of them is having weightage of 10 marks.

	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	TOTAL	75% marks of total	VIVA 25 %	Final total
Marks	10	10	10	10	10	10	10	10	10	10	100	Convert on 75% marks	25	Total + viva
Minimum 40% mark is mandatory to clear the subject														

SEE Component:

One 100 marks SEE exam is conducted by university. Minimum 40 marks is mandatory to clear the subject.

Considering the scenario mentioned above, answer the following questions:

1. Read the given CSV file share with an assignment and use any python data structure (DataFrames, ndArray etc) to load the data into the system.
2. Fill the missing values of p6, p7, p8, p9 and p10. You can use any techniques to fill the missing value for all students.
3. Generate the random marks for sessional, innovative assignment viva and SEE exam filed. Marks range is given in the above tables.
4. Make a list of students who obtain the less than 40% marks in any of components means CE, LPW and SEE in Django HMTL table.
5. Draw a pie chart which show the details of finally how many student get clear the course and how many of them are failed.
6. Make search page, where I will enter the student roll number and all the marks is displayed.