

Syllabus

Course Code	Course Name	Hours per Week			Total	
		${f L}$	T	P	Hrs.	Credits
CA5CO32	Advanced Programming Lab-II	0	0	2	2	1

List Of Experiments

- 1. Create a 3×3 numpy array of all True's (Boolean)
- 2. Get the common items between array1 and array2
- 3. Swap rows 1 and 2 in the array.
- 4. Reverse the columns of a 2D array.
- 5. Print or show only 3 decimal places of the numpy array.
- 6. . how to compute mean, median and standard deviation of an array.
- 7. Create pandas series from different data types like list, numpy array and dictionary.
 - 8. Retrieve the first field in df from any csv?
 - 9. How to get the items of series A not present in series B.
 - 10. How to get the items not common to both series A and series B?
 - 11. Calculate the frequency counts of each unique value in series.
- 12. How to extract items at given positions from a series.
- 13.Retrieve data from any CSV file(eg. Olympics.csv)
 - a Which country has won the most gold medals in all games?
 - b Which country has won the most gold medals in summer games?
 - c Which country has won the most gold medals in winter games?

- d. Which country had the biggest difference between their summer and winter gold medal counts?
- e. Which country has the biggest difference between their summer and winter gold medal counts relative to their total gold medal count?
- f. Only include countries that have won at least 1 gold in both summer and winter.
 - 14.Draw boxplot for following data

```
[3,5,8,8,9,11,12,12,13,13,16]
[220,252,256,312,332,332,400]
[18,25,29,33,44]
[19, 12, 9, 7, 17, 10, 6, 18, 9, 14, 19, 8, 5, 17, 9]
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15. Calculate total sale data for last year for each product and show it using a Pie chart from Electronics_data.csv

Note: In Pie chart display Number of units sold per year for each product in percentage.

- 16.Implementation of Linear Regression.
- 17.Implementation of
- 18.Implementation of K- Logistic Regression means.
- 19. Implementation Naive Bayes classifier.
- 20. implementation of K Nearest-Neighbours.