मेडी-केप्स विश्वविद्यालय, इंदौर

Medi-Caps University, Indore

Syllabus

| Course Code | Course Name | Hours per Week | | | Total | |
|---|---|---|---|---|---|---|
| | | L | T | P | Hrs. | Credits |
| CA5CO32 | Advance 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]
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. Implemetation of Linear Regression.
17. Implemetation of Logistic Regression

18. Implemetation of K-means.
19. ImplementationNaive Bayes classifier.
20. implementation of KNearest-Neighbours.