**DATA SCIENCE & MACHINE LEARNING-LAB CYCLE 2**

1. Create a three dimensional array specifying float data type and print it.
2. Create a 2 dimensional array (2X3) with elements belonging to complex data type and print it. Also display
3. the no: of rows and columns
4. dimension of an array
5. reshape the same array to 3X2
6. Familiarize with the functions to create
7. an uninitialized array
8. array with all elements as 1,
9. all elements as 0
10. Create an one dimensional array using **arange** function containing 10 elements.

Display

1. First 4 elements
2. Last 6 elements
3. Elements from index 2 to 7
4. Create an 1D array with **arange** containing first 15 even numbers as elements
5. Elements from index 2 to 8 with step 2(also demonstrate the same using slice function)
6. Last 3 elements of the array using negative index
7. Alternate elements of the array
8. Display the last 3 alternate elements
9. Create a 2 Dimensional array with 4 rows and 4 columns.
10. Display all elements excluding the first row
11. Display all elements excluding the last column
12. Display the elements of 1st and 2nd column in 2nd and 3rd row
13. Display the elements of 2nd and 3rd column
14. Display 2nd and 3rd element of 1st row
15. Display the elements from indices 4 to 10 in descending order(use –values)
16. Create two 2D arrays using array object and
17. Add the 2 matrices and print it
18. Subtract 2 matrices
19. Multiply the individual elements of matrix
20. Divide the elements of the matrices
21. Perform matrix multiplication
22. Display transpose of the matrix
23. Sum of diagonal elements of a matrix
24. Demonstrate the use of insert() function in 1D and 2D array
25. Demonstrate the use of diag() function in 1D and 2D array.
26. Demonstarte the use of append() function in 1D and 2D   
     array.
27. Demonstarte the use of sum() function in 1D and 2D array.