## List of Data Science Programs

- 1. Write a script to get the largest number from a list.
- 2. Write a program to remove duplicates from a list.
- 3. Write a script to convert a tuple to a dictionary.
- 4. Write a script to merge two python dictionaries.
- 5. Write a function that takes two lists and returns true if they have at least one common member.
- 6. Write a program to determine which one is the earlier date from the two given dates.
- 7. Write a script to subtract 5 days from current date.
- 8. Write a program to open a file and copy the contents to another file.
- 9. Write a program to capitalise each word in a file.

## Hint - Use str.upper() method

10. Write a program to search a word in a file and replace with another word.

## Hint - Use str.replace("old text", "new text") method

- 11. Write a program to count number of lines in a file.
- 12. Write a program to retrieve lines having two consecutive 1's.
- 13. Write programs to perform the following matrix operations. (Use matrices of order 3 X 3)
  - (a) addition
  - (b) subtraction
  - (c) multiplication
  - (d) scalar multiplication
  - (e) transpose
- 14. Create the following matrices for various 2D geometric transformations.
  - (a) translation matrix
  - (b) rotation matrix
  - (c) scaling matrix
- 15. Create the following matrices for various 3D geometric transformations.
  - (a) translation matrix
  - (b) rotation matrix
  - (c) scaling matrix