# Assignment B.TECH 3 rd Sem:

1.A python program that generates prime numbers with the help of a function to test prime or not.

2.A lambda function to calculate the sum of two numbers. And find the bigger number in the two numbers.

3.A python program to retrieve elements from a matrix and display them using Lists.

O/P :        Display the list as it is:[[1,2,3],[4,5,6],[7,8,9]]

        Display row by row:
        Display each column in row 0:
        Display each column in row 1:
        Display each column in row 2:
        Display all elements using for:

4. A python program to insert a new element into a tuple of elements at a specified position ..

Hints: Take 4 names as input,Next we want to enter a new name in any specified position..And afterthat show the new tuples.

5. A python program to create a regular expression to search whether a given string is starting with "He " or not.

6. A  python program to create a regular expression to retrieve all words having 5 characters length.

- Using NUMPY

1.Create two 2-D arrays and Plot them using Matplotlib.

Printing Original array

[[34 43 73]

 [82 22 12]

 [53 94 66]]

```
Array after deleting column 2 on axis 1
[[34 73]
 [82 12]
 [53 66]]
Array after inserting column 2 on axis 1
[[34 10 73]
 [82 10 12]
 [53 10 66]]
```

2.Print  max from axis 0 and min from axis 1 from the following 2-D array.

```
Printing Original array
[[34 43 73]
 [82 22 12]
 [53 94 66]]
Printing a min Of Axis 1
[34 12 53]
Printing a max Of Axis 0
[82 94 73]
```

3.Generate a Python list of all the even numbers between 4 to 30

```
[4, 6, 8, 10, 12, 14, 16, 18, 20, 22, 24, 26, 28]
```

4.Write a python statement to create a numpy array zero of zeros with 2 rows and 4 columns.

5.Create An array and Checking Array Shape,dimensions,size,Dtype

6.How To Convert a NumPy Array to List.

7.How to convert a list to an array in Python.

8.A python program to accept a matrix from the keyboard and display the transpose matrix.

o/p: Original Matrix :

[[1 2 3]

[4 5 6]]

Transpose Matrix:

[[1 4]

[2 5]

[3 6]]

9.3D array create and use Reshaping and Flatten method.

10.A python program to creating an array with 5 equal points using linspace.

11.A python program to create a regular expression that reads email ids from a text file.

Text-This Project is assigned to Mr. N Nageswara rao at nag.r@rediffmail.com,and in case of any queries ,you can contact  Mr Mahesh babu at mahesh.k@gmail.com ,or Ms Veena Kumar at veena@project.org who would be acting as assistant project co ordinator.

12.A python program to display employee id no.s on x axis and their salaries on y axis in the form of a bar graph for two departments of a company.

13. A python program to create a line graph to show the profits of a company in various years.

Hints: Years=2012,2013,2014,2015,2016,2017,2018,2019,2020

Profit=9,10,10.5,8.8,10.9,9.75,9.12,5,6.60,7.76,8.90

14. A program to display a histogram showing the number of employees in specific age groups.

Hints- Take individual employee ages and range of ages.

## 15. From  Datasets:

1. Read the dataset

2. No of coloumns and rows.

3. Retrieving 7 rows and 5 column from dataframe,

4. Reteiving a particular  range of rows/coloumn of rows…

5. Finding maximum and minimum values

6. Displaying statistical information

7. Handling Missing data.

8. correlation and co efficient

9. Find Mean,median,mode value

10.pie chart