**Tensor Flow Model**

**Day 3:**

// 1.Using data stored in the data base of fire wall, to access the data base from Fire Base and analyze the data the python code is given in this document.

(My database is available in https://tensor3-598ec.firebaseio.com/)

//To begin interacting with the database from a python environment, initialize the SDK with the Real time data base URL:

import firebase

from firebase import credentials

cred=credentials.Cert('path/to/serviceKey.json')

firebase.initialize\_app(cred,{ 'databaseURL' : 'https://tensor3- 98ec.firebaseio.com/'

})

// 2.In the Firebase Real time Database, all data values are stored as JSON. To fetch all the users in your storage simply do the following:

from firebase import firebase

firebase=firebase.FirebaseApplication('https://tensor3- 598ec.firebaseio.com/', None)

result = firebase.get('/users', None)

print result

//From above we get all the customer details stored in the database of Real time environment(Tensor3 database) as:

{'101': 'raji', '102': 'hema', '103': 'murali', '104': 'siva'........}//entire customers list will be obtained

//We can also push data into Database which is in Firebase

//For example:

from firebase import db

root = db.reference()

# Add a new user under /users.

new\_user = root.child('users').push({

'cid' : 115,

'pid' : 15,

'ptype':'story books',

'pname':'Old man and his god',

'price':500,

'qty':5

'cname':'charan';

'email':'charanl@gmail.com',

'phoneno':8978978898 })

//To retrieve the first five highest purchased products, based on the quantity that each person done. we have python code as:

from firebase import db

product= db.reference('tensor3')

result = product.order\_by\_child('qty').limit\_to\_last(5).get()

//Based on the data I stored in database I got

First Highest products purchased are:

1.pid:15

ptype: story books

pname: Old man and his god

2.pid:7

ptype: cosmetics

pname: lipbalm

3.pid:8

ptype: jewellery

pname: bangles

4.pid:14

ptype: kidswear

pname: handkey

5.pid:3

ptype: stationary

pname: pens

//By considering the data future prediction of product that the customer buys is obtained by using Tensor flow model, and to work out this we have to design an app in **Android studio**.