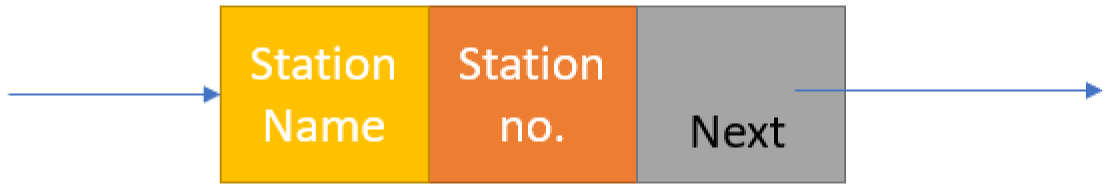
NAMMA METRO APPLICATION

ABSTRACT

- This application shows the number of metro stations present in the Bangalore city. There are total of 40 stations in Bangalore.
- This application has a fare calculator with which we can see the prices from station to station.
- In this application we can even recharge the smart card(varshik).
- This application even shows the balance of the smart card(varshik).

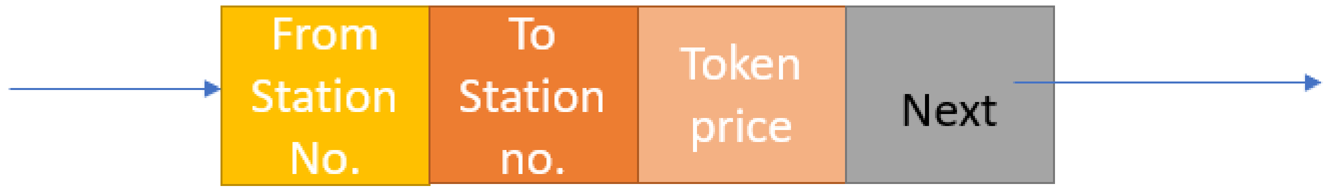
CLASSES AND MODULES

- Class stnNameFrmNo
  - Attributes:
    - node head ;
    - Int size;
  - Functions:
    - void insertStnIntoList(String d,double p);
    - String retStnNamne(double stn);
    - void insertStations();



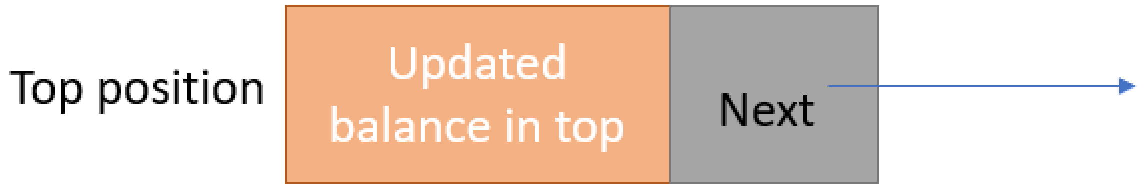
CLASSES AND MODULES

- Class dataForTicketGen
  - Attributes:
    - nde front, rear;
  - Functions:
    - String displayDataForVarshik(double s1,double s2);
    - void insertIntoList(int s1,int s2,double t);
    - void insertTicketdata();
    - String displayDataForTokken(double s1,double s2);
    - String displayDataForVarshik(double s1,double s2);



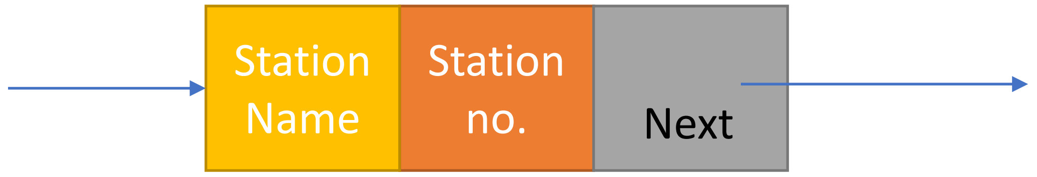
CLASSES AND MODULES

- class transactionSheet
  - Attributes:
    - traNode head;
  - Functions:
    - void push(double ele);
    - void display();
    - void getStore();
    - String peek();

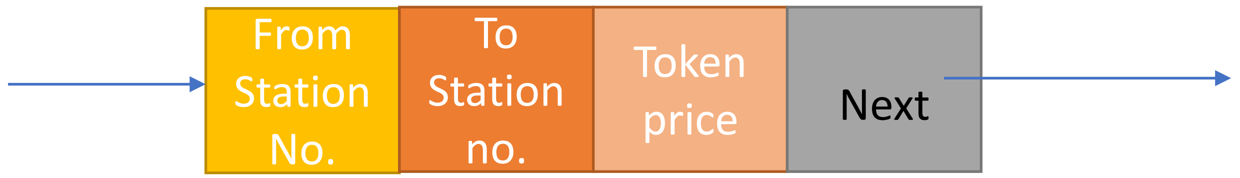


DATA STRUCTURES USED

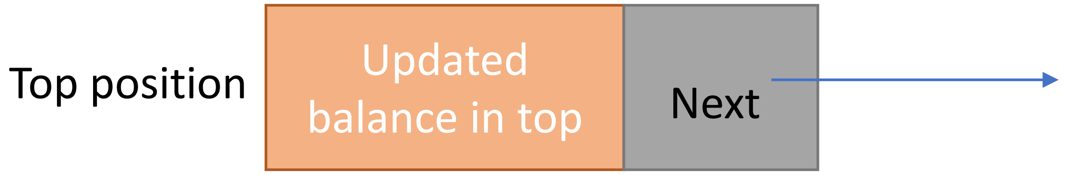
- Linked list-1, in which each node has a 2 data parts and the next part. This data structure is used for determining the station no. with station name.



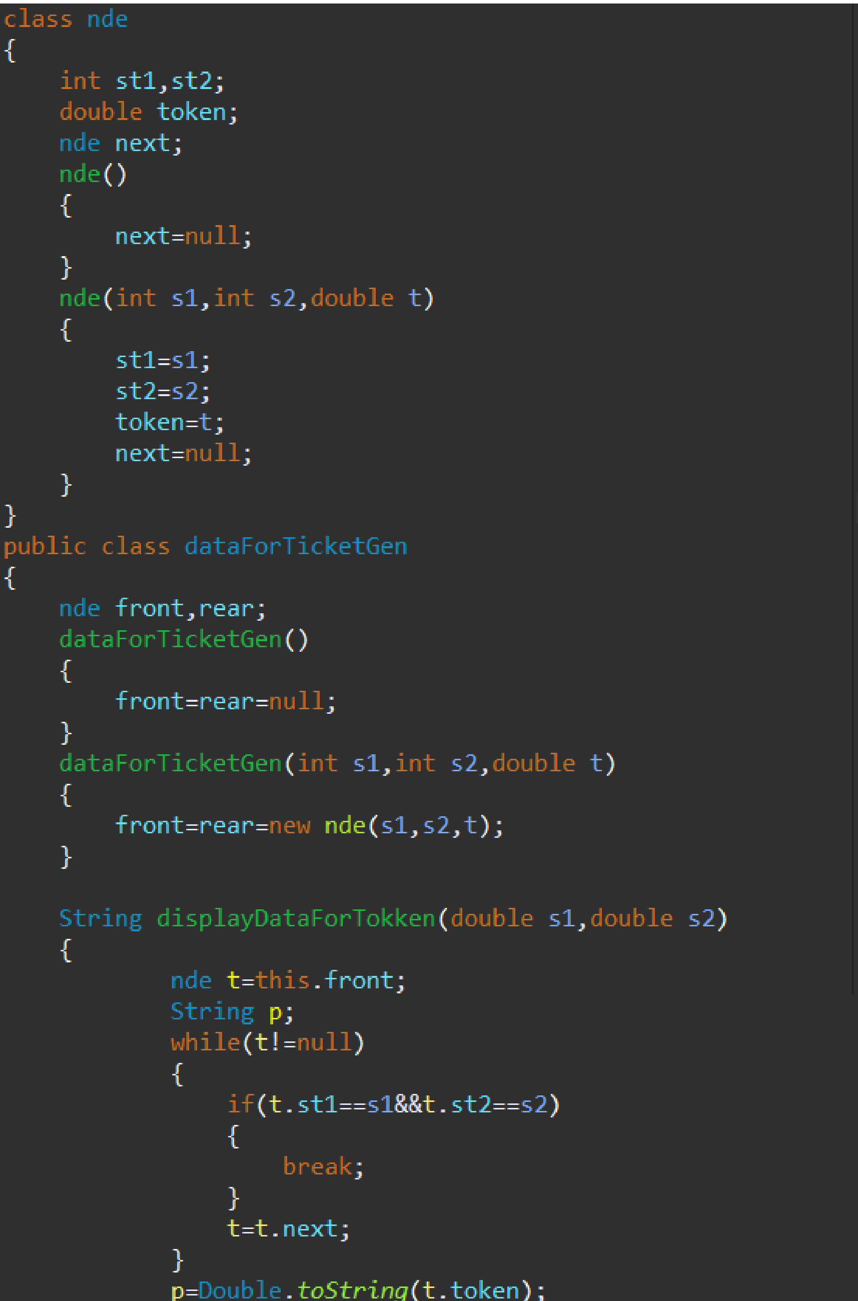
- Linked list-2, in which each node consists of 3 data parts which are from station no. , to station no., and token value price and a next node address part.



- Stack using linked list- in which the balance of the smart card is updated.

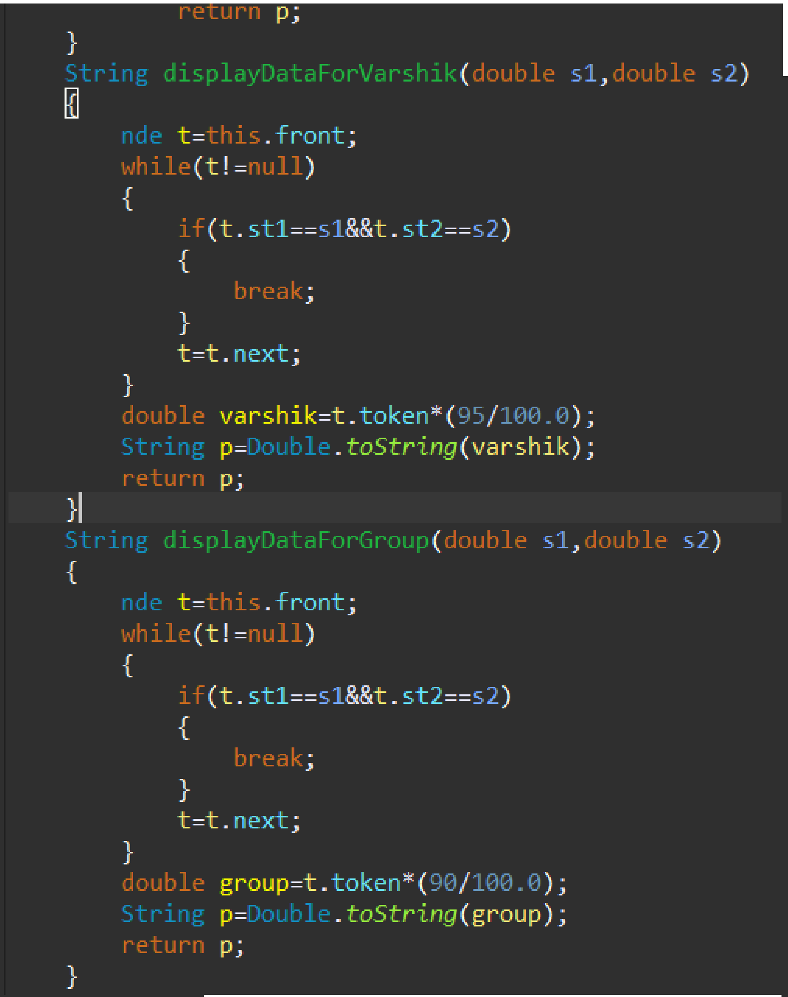


SAMPLE CODE

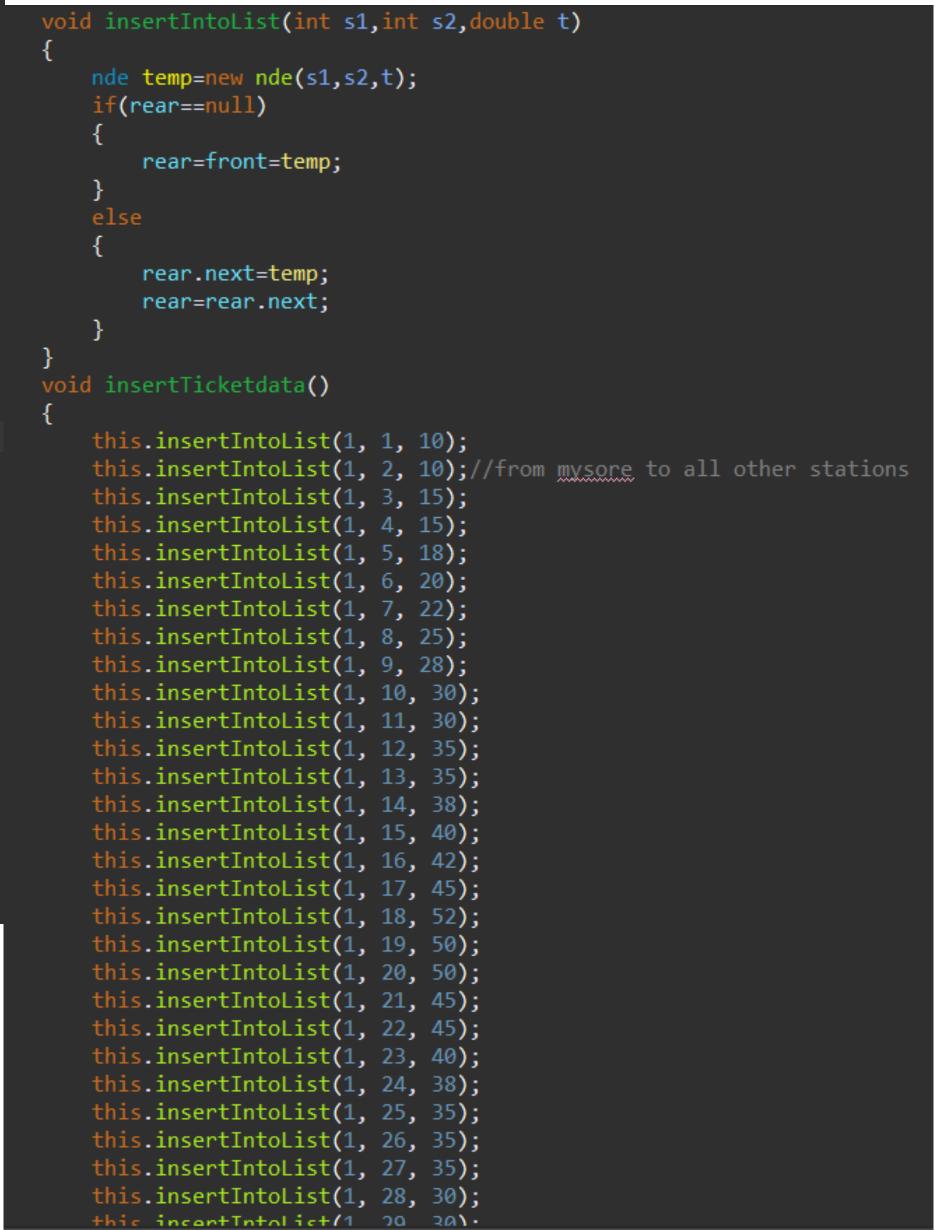


```
class nde
{
    int st1,st2;
    double token;
    nde next;
    nde()
    {
        next=null;
    }
    nde(int s1,int s2,double t)
    {
        st1=s1;
        st2=s2;
        token=t;
        next=null;
    }
}
public class dataForTicketGen
{
    nde front,rear;
    dataForTicketGen()
    {
        front=rear=null;
    }
    dataForTicketGen(int s1,int s2,double t)
    {
        front=rear=new nde(s1,s2,t);
    }

    String displayDataForTokken(double s1,double s2)
    {
            nde t=this.front;
            String p;
            while(t!=null)
            {
                if(t.st1==s1&&t.st2==s2)
                {
                    break;
                }
                t=t.next;
            }
            p=Double.toString(t.token);
```

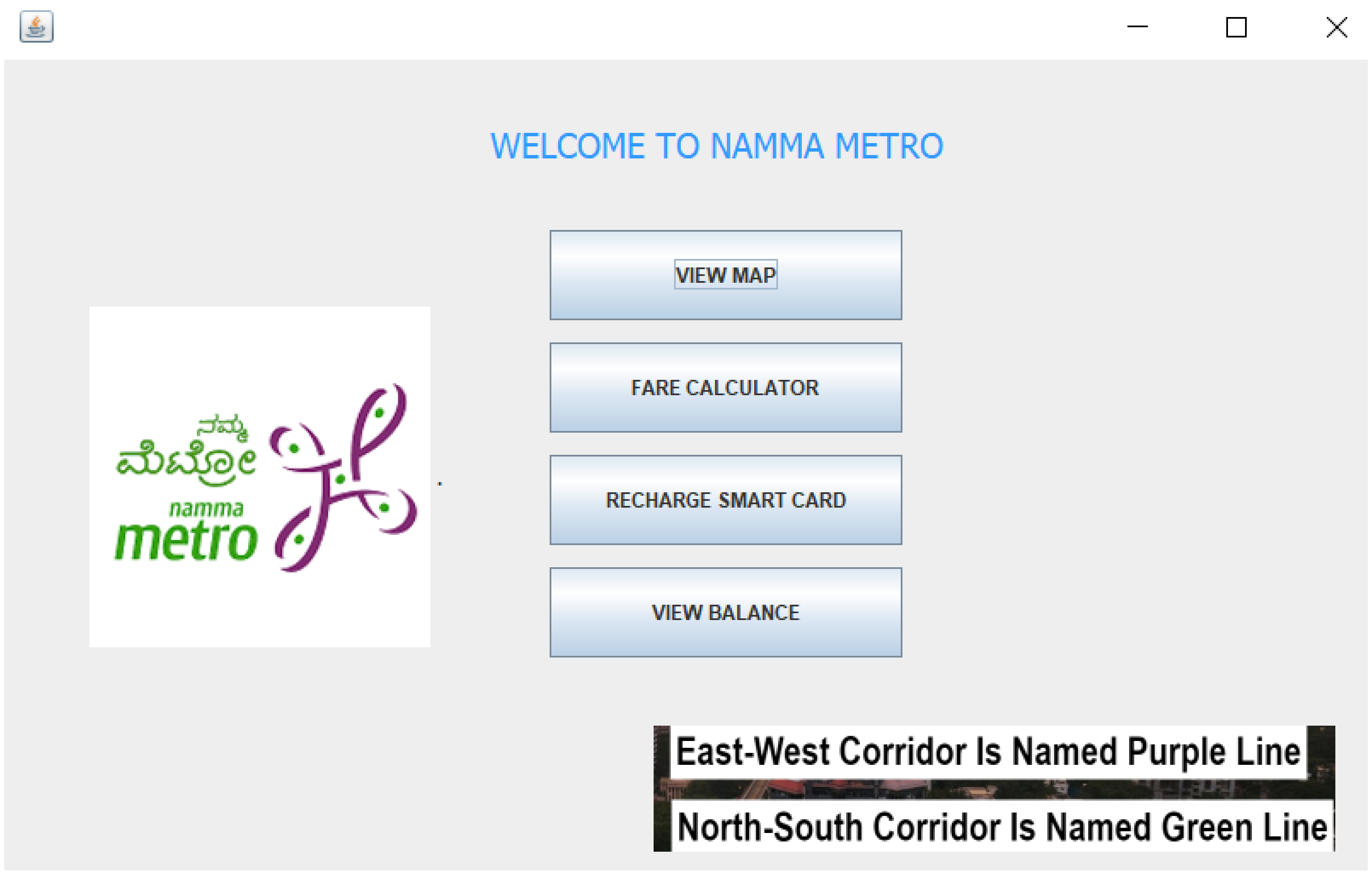


```
            return p;
    }
    String displayDataForVarshik(double s1,double s2)
    {
        nde t=this.front;
        while(t!=null)
        {
            if(t.st1==s1&&t.st2==s2)
            {
                break;
            }
            t=t.next;
        }
        double varshik=t.token*(95/100.0);
        String p=Double.toString(varshik);
        return p;
    }
    String displayDataForGroup(double s1,double s2)
    {
        nde t=this.front;
        while(t!=null)
        {
            if(t.st1==s1&&t.st2==s2)
            {
                break;
            }
            t=t.next;
        }
        double group=t.token*(90/100.0);
        String p=Double.toString(group);
        return p;
    }
```



```
void insertIntoList(int s1,int s2,double t)
{
    nde temp=new nde(s1,s2,t);
    if(rear==null)
    {
        rear=front=temp;
    }
    else
    {
        rear.next=temp;
        rear=rear.next;
    }
}
void insertTicketdata()
{
    this.insertIntoList(1, 1, 10);
    this.insertIntoList(1, 2, 10);//from mysore to all other stations
    this.insertIntoList(1, 3, 15);
    this.insertIntoList(1, 4, 15);
    this.insertIntoList(1, 5, 18);
    this.insertIntoList(1, 6, 20);
    this.insertIntoList(1, 7, 22);
    this.insertIntoList(1, 8, 25);
    this.insertIntoList(1, 9, 28);
    this.insertIntoList(1, 10, 30);
    this.insertIntoList(1, 11, 30);
    this.insertIntoList(1, 12, 35);
    this.insertIntoList(1, 13, 35);
    this.insertIntoList(1, 14, 38);
    this.insertIntoList(1, 15, 40);
    this.insertIntoList(1, 16, 42);
    this.insertIntoList(1, 17, 45);
    this.insertIntoList(1, 18, 52);
    this.insertIntoList(1, 19, 50);
    this.insertIntoList(1, 20, 50);
    this.insertIntoList(1, 21, 45);
    this.insertIntoList(1, 22, 45);
    this.insertIntoList(1, 23, 40);
    this.insertIntoList(1, 24, 38);
    this.insertIntoList(1, 25, 35);
    this.insertIntoList(1, 26, 35);
    this.insertIntoList(1, 27, 35);
    this.insertIntoList(1, 28, 30);
    this.insertIntoList(1, 29, 30);
```

MAIN PAGE

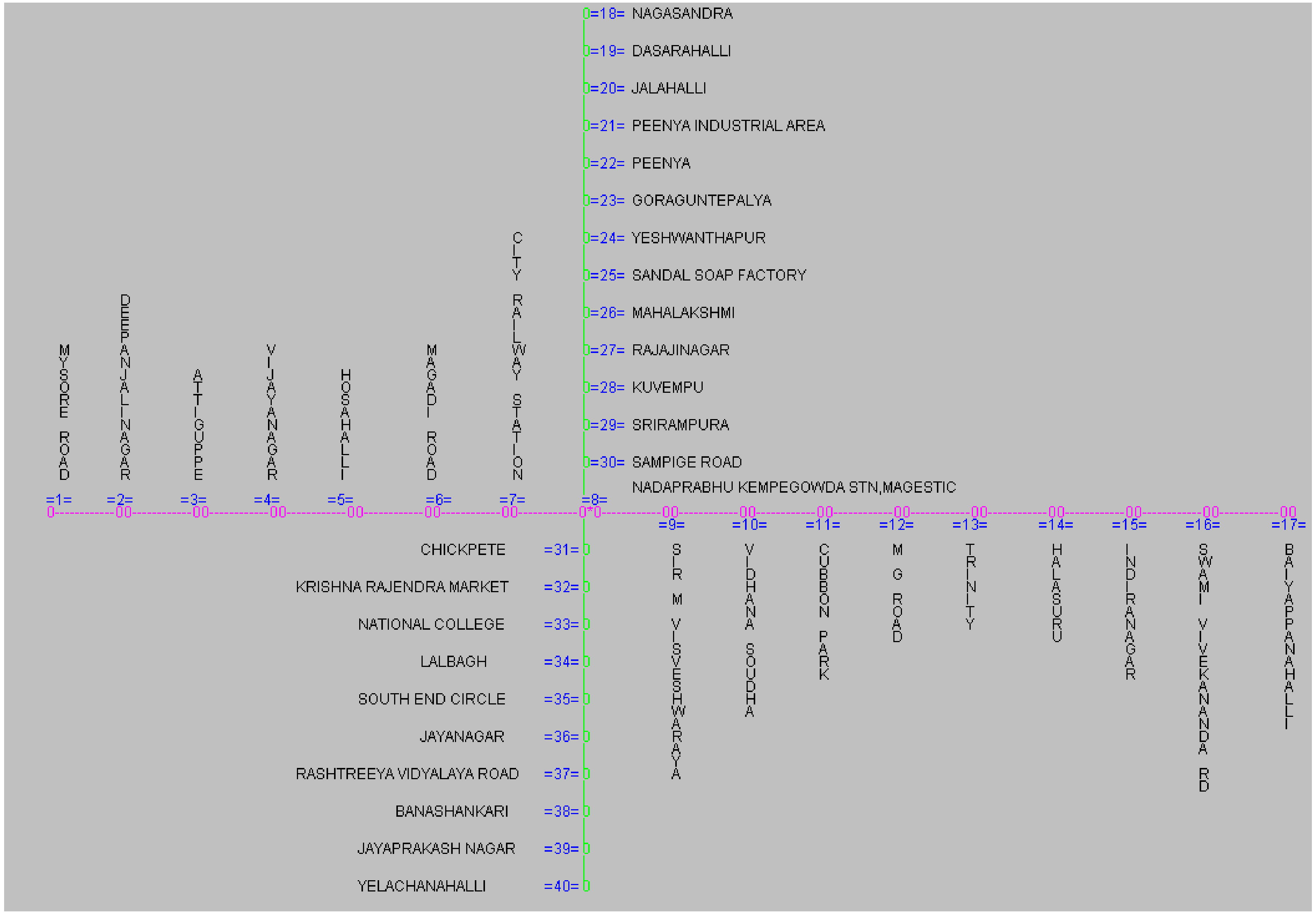


WELCOME TO NAMMA METRO

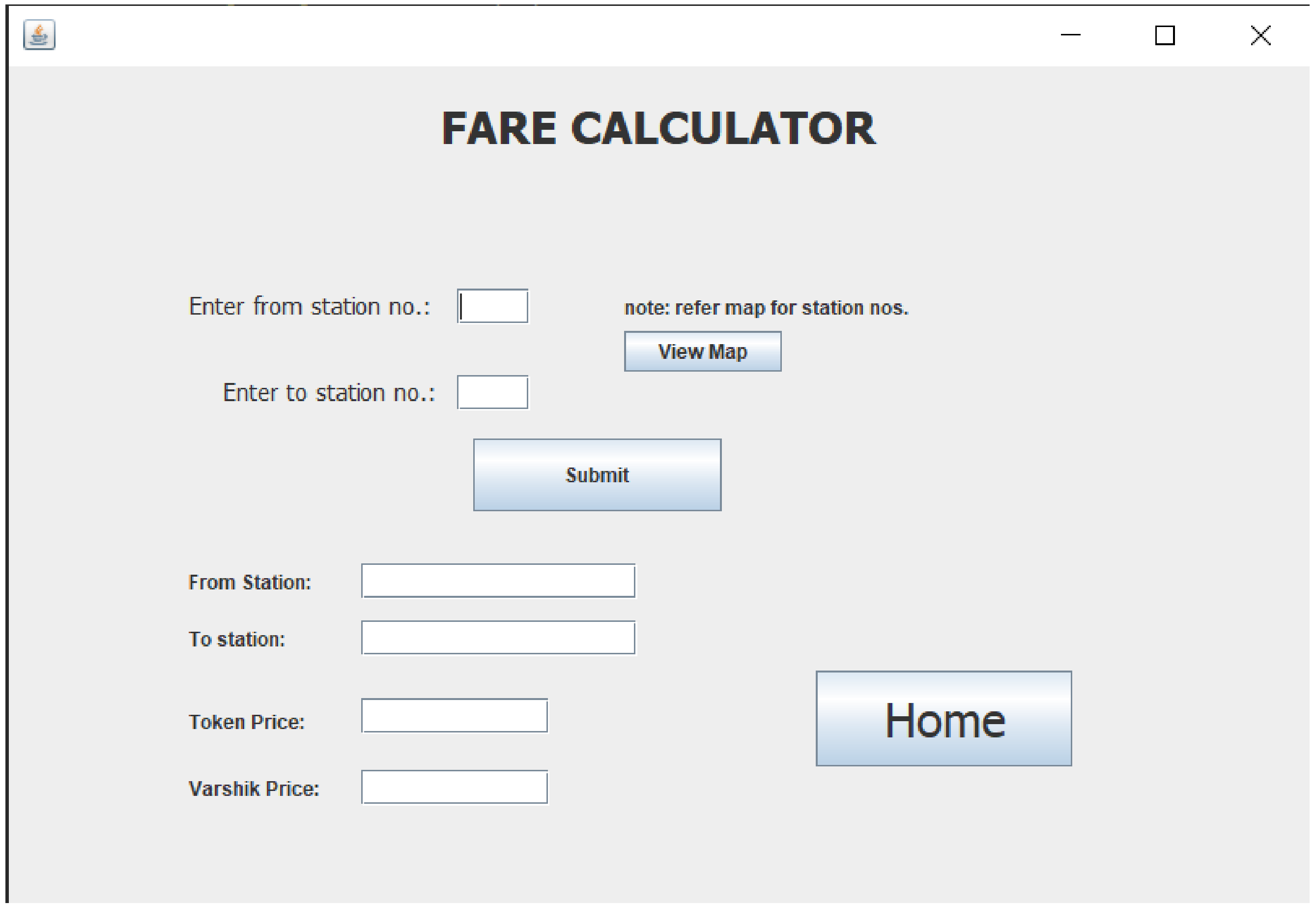
East-West Corridor Is Named Purple Line

North-South Corridor Is Named Green Line

METRO MAP:


=18= NAGASANDRA
=19= DASARAHALLI
=20= JALAHALLI
=21= PEENYA INDUSTRIAL AREA
=22= PEENYA
=23= GORAGUNTEPALYA
=24= YESHWANTHAPUR
=25= SANDAL SOAP FACTORY
=26= MAHALAKSHMI
=27= RAJAJINAGAR
=28= KUVEMPU
=29= SRIRAMPURA
=30= SAMPIGE ROAD
=1= MYSORE ROAD
=2= DEEPANJALINAGAR
=3= ATTIGUPPE
=4= VIJAYANAGAR
=5= HOSAHALLI
=6= MAGADI ROAD
=7= CITY RAILWAY STATION
=8= NADAPRABHU KEMPEGOWDA STN,MAGESTIC
=9= SIR M VISVESHWARAYA
=10= VIDHANA SOUDHA
=11= CUBBON PARK
=12= M G ROAD
=13= TRINITY
=14= HALASURU
=15= INDIRANAGAR
=16= SWAMI VIVEKANANDA RD
=17= BAIYAPPANAHALLI
CHICKPETE =31=
KRISHNA RAJENDRA MARKET =32=
NATIONAL COLLEGE =33=
LALBAGH =34=
SOUTH END CIRCLE =35=
JAYANAGAR =36=
RASHTREEYA VIDYALAYA ROAD =37=
BANASHANKARI =38=
JAYAPRAKASH NAGAR =39=
YELACHANAHALLI =40=

FARE CALCULATOR



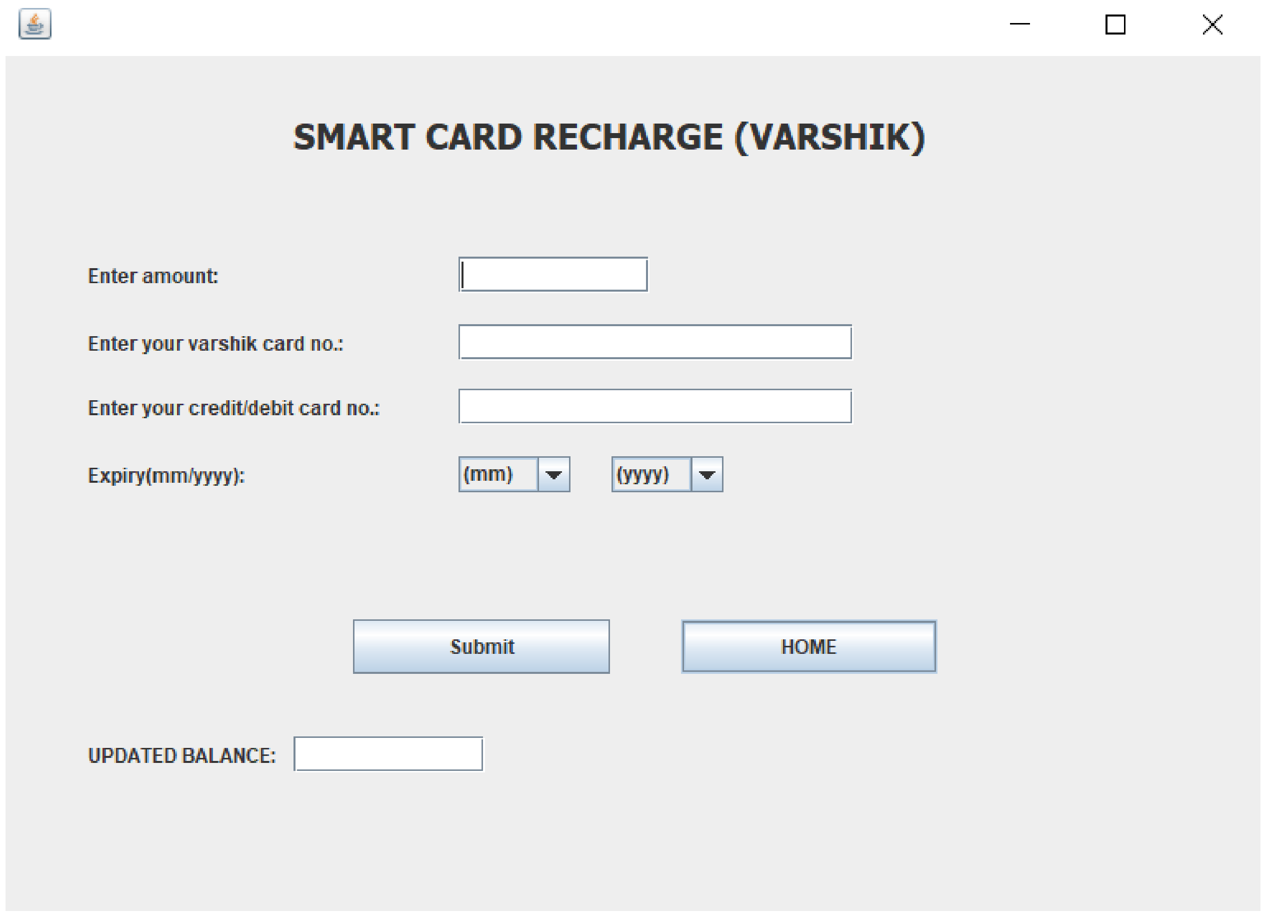
FARE CALCULATOR

Enter from station no.:	
Enter to station no.:	

note: refer map for station nos.

From Station:	
To station:	
Token Price:	
Varshik Price:	

RECHARGE

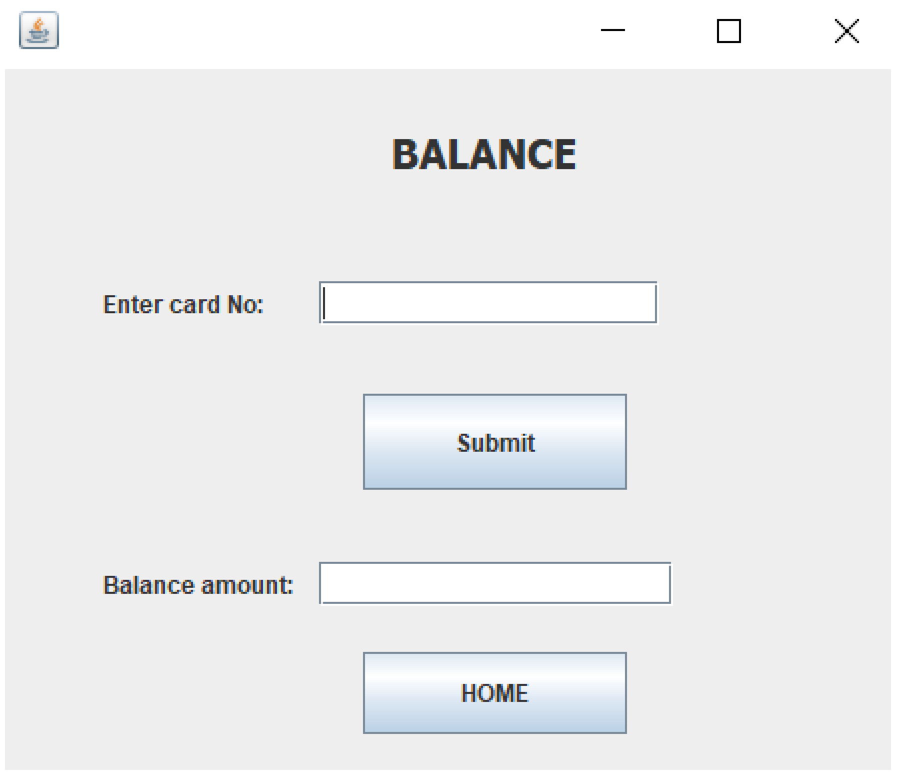


SMART CARD RECHARGE (VARSHIK)

Enter amount:	
Enter your varshik card no.:	
Enter your credit/debit card no.:	
Expiry(mm/yyyy):	(mm) (yyyy)

UPDATED BALANCE:

CARD BALANCE


BALANCE
Enter card No:
Submit
Balance amount:
HOME