Cycle 2

Routing Algorithm to find shortest path using Djiktra,

```
void        Djiktras_Algo ( vector< list< pair<int,int> >> graph,
                            int u, int n )
{   vector <bool> visited ( n, false);
    vector <int> path;
      path.push_back (u);
    vector<int> min_dis (n, INT_MAX);

    while (true)
{     bool flag_all_visi = true; int min_dis_val = INT_MAX;
      for (int i = 0; i<n; i++)        int min_dis_v;
      {     if ( ! visited[ i ]) flag_all_visi = false;
            if ( min_dis [ i ] < min_dis_val )
            {   min_dis_val = min_dis[ i ];
                min_dis_v = i ;
            }
      }
      if (flag_all visited) break;
      v = min_dis_v;
      min_dis[v] = min (min_dis[v],

for ( int it = graph[v].begin(); it != graph[v].end();
                                  it ++)
{     min_dis [*it].first = min (min_dis [*it].first,
                                 min_dis [u] +
                                 it -> second);
}
}
```