```
for(j=0;j<NETWORK_SIZE;j=j+1)                    //read adjacency matrix at row j
    for(i=0;i<NETWORK_SIZE;i=i+1)                //and column i
        if(adjacencyMatrix[j][i]==1)                    //provide path from node j to node i
        begin
            input_address=i;
            output_address=j;
            routingTable[i][j][CENTER]=1;               //connect packet coming to router i from source j to PE
            if(output_address[X]>input_address[X])          //establish path along x axis
                for(x=output_address[X]; x>input_address[X]; x=x-1)
                    routingTable[output_address[Y]*X_SIZE+x][j][WEST]=1;
            else
                for(x=output_address[X]; x<input_address[X]; x=x+1)
                    routingTable[output_address[Y]*X_SIZE+x][j][EAST]=1;
            if(output_address[Y]>input_address[Y]))                 //establish path along y axis
                for(y=output_address[Y];y>input_address[Y];y=y-1)
                    routingTable[y*X_SIZE+input_address[X]][j][SOUTH]=1;
            else  if(output_address[Y]<input_address[Y])
                    routingTable[y*X_SIZE+input_address[X]][j][NORTH]=1;
        end
```