

For every cycle of update:

Damage level of each road is updated as

If (Damage=0)

{

 Damage=2;

}

Else if (Damage =1)

{

 Damage=0;

}

Else {

 Damage=1;

}

Amount of resources available at places are updated as :

// note: I is position of the location in initial

input

// k is total number of locations

If (resources at Ith location is > Threshold+k)

{

 New resources at Ith location = resources before at Ith location – k % I ;

}

Else If (resources at Ith location is < Threshold+k && resources at Ith location is > Threshold)

{

 New resources at Ith location = resources before at Ith location – I;

}

Else{

 New resources at Ith location = Threshold; }

Amount of resources available at resource centers are updated as :

// here resources indicate before cycle of update;

If ($8 * \text{threshold} > \text{resources} \&\& \text{resources} > \text{threshold}$) {

 New resources = resources + threshold;

}

Else if (resources $\geq 8 * \text{threshold}$) {

 New resources = resources – threshold;

}

Else{

 New resources = resources + $8 * \text{threshold}$

}