

### Maekawa's Algorithm:

```
#include<stdio.h>
#include<stdlib.h>
struct site
{
int rq[2];
int ts;
};
int main()
{
struct site s[20];
int n,i,j,ii,jj,count=0;
printf("\nEnter the number of site in distributed system\n");
scanf("%d",&n);
for(i=0;i<n-2;i++)
{
s[i].rq[0]=i;
s[i].rq[1]=n-2;
i++;
s[i].rq[0]=i;
s[i].rq[1]=n-1;
i++;
s[i].rq[0]=1;
s[i].rq[1]=0;
printf("\n The REQUEST SET for %d nodes is as follows\n\n",n);
for(j=0;j<n;j++) {
printf("node%d is",j);
printf(" ");
for(i=0;i<2;i++)
{
printf("%d" ,s[j].rq[i]);
printf(" ");
}
printf("\n"); }
printf("\n Enter the two nodes computing to enter the cs\n");
scanf("%d %d",&ii,&jj);
printf("\n Enter the timestamp of the 2 node \n");
scanf("%d %d",&s[ii].ts, &s[jj].ts);
for(i=0;i<2;i++)
{
for(j=0;j<2;j++)
{
if (s[ii].rq[i]==s[jj].rq[j])
{
count++;
printf("Request message is sent to the site %d\n",n-2);
if (s[ii].ts<s[jj].ts)
```

```
{
printf("First site %d enter the cs\n",ii);
printf("Next site %d enter the cs\n",jj);
}
else {
printf("First site %d enter the cs\n",jj);
printf("Next site %d enter the cs\n",ii);
}}
if(count==0) {
printf ("No sites is common in the request set of sites%d and %d\n",ii,jj);
printf("Hence conflict cannot be resolved\n");
}
}}
```