```c
#include<stdio.h>
void floyd(int p[10][10],int n) {
int i,j,k;
for (k=1;k<=n;k++)
for (i=1;i<=n;i++)
for (j=1;j<=n;j++)
if(p[i][k] + p[k][j] < p[i][j])
p[i][j]=p[i][k] + p[k][j];
}
void main() {
int p[10][10], n, i,j;
printf("\n Enter the number of vertices:");
scanf("%d",&n);
printf("\n Enter the Adj matrix:");
for (i=1;i<=n;i++) {
for (j=1;j<=n;j++){
scanf("%d",&p[i][j]);
}
}
printf("\n Matrix of input data: \n");
for (i=1;i<=n;i++) {
for (j=1;j<=n;j++)
printf("%d\t",p[i][j]);
printf("\n");
}
floyd(p,n);
printf("\n Transitive closure: \n");
for (i=1;i<=n;i++) {
for (j=1;j<=n;j++)
printf("%d\t",p[i][j]);
printf("\n");
}
}

```