**CODE:**

#include<stdio.h>

int main()

{

int n;

printf("Enter the number of nodes: ");

scanf("%d", &n);

int matrix[n][n];

printf("Enter the matrix element:\n");

for (int i = 0; i < n; i++)

{

printf("Enter the distance for node %d:\n", i + 1);

for (int j = 0; j < n; j++)

{

scanf("%d", &matrix[i][j]);

}

}

for (int i = 0; i < n; i++)

{

printf("The link state packets for node %d:\n", i + 1);

printf("NODE DISTANCE\n");

for (int j = 0; j < n; j++)

{

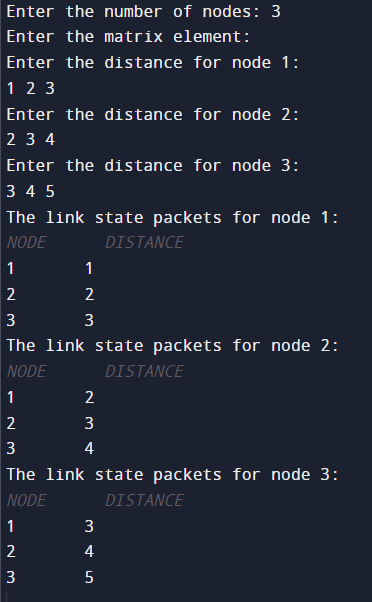
printf("%d\t\t%d\n", j + 1, matrix[i][j]);

}

}

}

**OUTPUT:**

****