Print all the nodes reachable from a given starting node in a digraph using BFS method.

```
#include<stdio.h>
#include<conio.h>

int a[20][20], q[20], visited[20], n, i, j, f = -1, r = -1;

void bfs(int v) {
   q[++r] = v;
   visited[v] = 1;

   while (f <= r) {
      v = q[f++];

      for (i = 1; i <= n; i++) {
         if (a[v][i] && !visited[i]) {
            visited[i] = 1;
            q[++r] = i;
         }
      }
   }
}

void main() {
   int v;

   printf("\nEnter the number of vertices: ");
   scanf("%d", &n);
```

```
    for (i = 1; i <= n; i++) {
        q[i] = 0;
        visited[i] = 0;
    }

    printf("\nEnter graph data in matrix form:\n");
    for (i = 1; i <= n; i++) {
        for (j = 1; j <= n; j++) {
            scanf("%d", &a[i][j]);
        }
    }

    printf("\nEnter the starting vertex: ");
    scanf("%d", &v);

    bfs(v);

    printf("\nThe nodes which are reachable are:\n");
    for (i = 1; i <= n; i++) {
        if (visited[i]) {
            printf("%d\t", i);
        }
    }
    printf("\n");
}
```