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```

void dfs(int v)
{
    /* depth first search of a graph beginning at v */
    nodePointer w;
    visited[v] = TRUE;
    printf("%5d", v);
    for (w = graph[v]; w; w = w->link)
        if (!visited[w->vertex])
            dfs(w->vertex);
}

```

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**프로그램 6.1:** 깊이 우선 탐색

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```

void bfs(int v)
{
    /* breadth first traversal of a graph, starting at v
       the global array visited is initialized to 0, the queue
       operations are similar to those described in
       Chapter 4, front and rear are global */
    nodePointer w;
    front = rear = NULL; /* initialize queue */
    printf("%5d", v);
    visited[v] = TRUE;
    addq(v);
    while (front) {
        v = deleteq();
        for (w = graph[v]; w; w = w->link)
            if (!visited[w->vertex]) {
                printf("%5d", w->vertex);
                addq(w->vertex);
                visited[w->vertex] = TRUE;
            }
    }
}

```

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**프로그램 6.2:** 그래프의 너비 우선 탐색