

Degree of a Node - Software Testing

The degree of a node in a graph is the number of edges that have that node as an endpoint. We write $\text{deg}(n)$ for the degree of node n .

we might say that the degree of a node indicates its “popularity” in a graph. In fact, social scientists use graphs to describe social interactions in which nodes are people; edges often refer to things like “friendship.” “Communicates with”, and so on. If we make a graph in which objects are nodes and edges are messages, the degree of a node (object) indicates the extent of integration testing that is appropriate for the object.

The degree of the nodes in figure are

$$\text{deg}(n_1) = 2$$

$$\text{deg}(n_2) = 2$$

$$\text{deg}(n_3) = 1$$

$$\text{deg}(n_4) = 3$$

$$\text{deg}(n_5) = 1$$

$$\text{deg}(n_6) = 1$$

$$\text{deg}(n_7) = 0$$