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Assignment 1

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Download all latex-tikz codes from

https://github.com/Shreshta126/EE4013-C-and-DS/tree/main/assignment 1/codes

1 Problem

Let T be a tree with 10 vertices. What is the sum of degrees of all the vertices in T?

2 Solution

The number of edges connected to a vertex is the degree of the vertex.

Sum degrees of all the vertices will be double the number of edges. In a tree with 10 vertices, number of edges will be equal to 9. Therefore, sum of degrees of the vertices will be equal to 18.

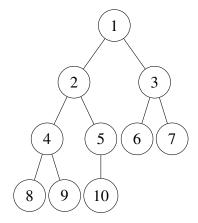


Fig. 0: Binary Tree

Code for obtaining the sum of degrees of vertices in any tree:

/codes/ee18btech11041.c