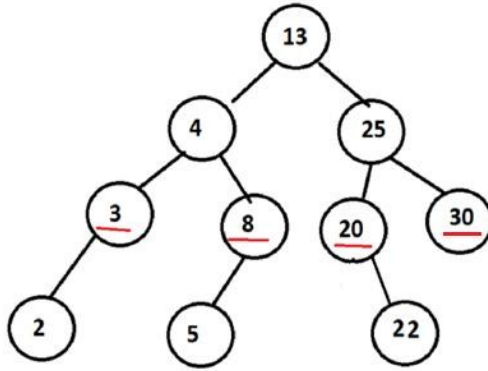


## 1) (10 pts) DSN (Binary Trees)

Write a **recursive** function named `sumAtDepth` that takes a pointer to the root of a binary tree, `root`, and non-negative integer, `depth`, and returns the sum of all the values in the nodes that are at a level `depth` below the root. For example, if you pass the root of the following binary tree and `depth = 2`, the function should return 61 ( $= 3 + 8 + 20 + 30$ ) since each of the nodes storing 3, 8, 20 and 30 are 2 levels below the root node of the tree. You may assume that `depth` is a non-negative integer.



You must write your solution in a **single** function. You cannot write any helper functions.

The function signature and node struct are given below.

```
typedef struct node
{
    int data;
    struct node *left;
    struct node *right;
} node;

int sumAtDepth(node *root, int depth) {

}

}
```