

1) (10 pts) DSN (Recursive Functions)

Write a *recursive* function `hasProperty` that takes the root of a ternary tree (a tree where each node has at most three children) and determines whether all the nodes that have a middle child also have both a left child and a right child. If so, return 1. Otherwise, return 0. Note: If the function is given a null input, it should return 1.

The node struct and functional prototype for this question are:

```
typedef struct node
{
    char *data;
    struct node *left, *middle, *right;
} node;
```

```
int hasProperty(node *root) {
```

```
}
```