```cpp
bool hnValDup(Node* head) {
    if (head == 0 || head->link == 0) return false;
    return hnValDupAuxRecur(head->link, head->data);
}

bool hnValDupAuxRecur(Node* head, int hnVal) {
    if (head == 0) return false;
    if (head->data == hnVal) return true;
    return hnValDupAuxRecur(head->link, hnVal);
}

bool listHasDupRecur(Node* head) {
    if (head == 0 || head->link == 0) return false;
    if (hnValDup(head)) return true;
    return (listHasDupRecur(head->link));
}
```