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/*the program is to create a tree of n nodes.. may not be ordered. duplications allowed*/
/* builds a tree of n nodes: n/2 in left tree first.. and the remainng in the right tree ... also the same in printing*/
#include <stdio.h>
#include <conio.h>
#include <malloc.h>
#include <process.h>

struct tree
{
int data;
struct tree *left;
struct tree *right;
};
struct tree * build(int);
void print(struct tree *t);

void main(void)
{
int n,i;
struct tree *t;
clrscr();
printf("\nEnter total no. of nodes: ");
scanf("%d",&n);
t=build(n);

clrscr();
printf("\n\n");
print(t);
}

```

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struct tree *build(int n)
{
    struct tree *newnode;
    int x, nl, nr;

    if (n==0)
        newnode=NULL;
    else
    {
        nl=n/2;
        nr=n-nl-1;
        printf("\nEnter the Node Value. : ");
        scanf("%d",&x);
        newnode=(struct tree*)malloc(sizeof(struct tree));
        newnode->data=x;
        newnode->left=build(nl);
        newnode->right=build(nr);
    }
    return (newnode);
}

void print(struct tree *t)
{
    if(t!=NULL)
    {
        print(t->left);
        printf(" %d -> ",t->data);
        print(t->right);
    }
}

```