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Main func

→ read the str from user

→ call extract string func

//pseudocode for extract str func

```
int i;
int j=0;
for(i=1;i<(strlen(str)-2);i++)
{
    if(str[i]!=' ')
    { //printf("%d %c\n",i,str[i]);
        if(str[i]=='(' && str[i+1]==' ' && str[i+2]==')')

            {
                str2[j]=str[i];
                str2[j+1]='N';
                str2[j+2]=str[i+2];
                i=i+2;
                j=j+3;
            }
        else
        {
            str2[j]=str[i];
            j++;
        }
    }
}
str2[j]='\0';
```

//pseudocode for tree insert

```
int index_t(char str[],int start,int end)
{
    struct stack *S;
    int i;
    S=(struct stack*)malloc(sizeof(struct stack));
    S->size=500;
    S->top=-1;
    if(start>end)
        return -1;
    for(i=start;i<=end;i++)
    {
        if(str[i]=='(')
            PUSH(S,str[i]);
        else if(str[i]==')')
            if(S->A[S->top]=='(')
            {
                POP(S);
                if(STACK_EMPTY(S)==-1)
                    return i;
            }
    }
    return -1;
}
```

```
struct node_bt* tree_insert(char str2[], int start, int end)
{
    if(start>end)
        return NULL;
    struct node_bt *root;
    root=(struct node_bt*)malloc(sizeof(struct node_bt));
    int num=0;
    int neg=0;

    int k;
    if(str2[start]=='-')
    {
        neg=1;
        start++;
        //printf("in neg\n");
    }
}
```

```

    }
    while(str2[start]>='0' && str2[start]<='9')
    {
        num*=10;
        num=num+(str2[start]-'0');
        start++;
    }
    start--;

    if(neg==1)
        num=num*-1;
    //printf("%d ",num);
    if(str2[start+1]=='N')
        root=create_node(-9999999);
    else
        root=create_node(num);
    int i=-1;
    if(start+1<=end && str2[start+1]=='(')
        i=index_t(str2,start+1,end);
    if(i!=-1)
    {
        root->leftchild=tree_insert(str2,start+2,i-1);
        root->rightchild=tree_insert(str2,i+2,end-1);
    }
    return root;
}

```

```

//pseudocode for read_and_store()
struct node_bt* root;
root=(struct node_bt*)malloc(sizeof(struct node_bt));
root=NULL;
root=tree_insert(str_p,0,strlen(str_p)-1);

```

Return root;

```

//pseudocode for print_employees(T)
void Preorder(struct node_bt *root) {

    if (root != NULL && root->value!=-9999999) {

```

```

        Preorder(root->leftchild);
        printf("%d ", root->value_id);
        Preorder(root->rightchild);

    }

int isBST(struct node_bt* root){
    struct node_bt *p=NULL;
    if(root!=NULL && root->value!=-9999999){
        if(!isBST(root->leftchild)){
            return 0;
        }
        if(p!=NULL && p->value!=-9999999 && root->value<=p->value){
            return 0;
        }
        p=root;
        return isBST(root->rightchild);
    }
    return 1;
}

//pseudocode to find max_employee(T)
struct node_bst* maximum(struct node_bst* node_test){
    struct node_bst* max;
    max=(struct node_bst*)malloc(sizeof(struct node_bst));
    max=node_test;
    while(max->rightchild!=NULL)
        max=max->rightchild;

    return max;
}

//pseudocode for find_employees(T)
for(int i=0;i<heightof(t);i++)
{if(T->reward>T->leftchild->reward+T->right->child->reward)
    print(T)
Else continue;
}

```