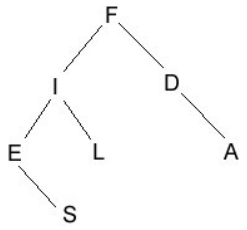
Programming Test
by
Fidelis Ololube.

DEPTH FIRST TREE TRAVERSAL

This kind of tree tries to go deeper in the tree before exploring siblings. It moves from the leftmost sibling to the right. This analogy can be taking as considering the different ranks of soldiers in the battle field from the topmost ranking soldier to the least, it show who takes over command in the death of another. Or considering and organisational structure from the least to the top. Base on thesame levels in the structure, the left nodes are considered first.

F,I,E,S,L,D,A




```
if(tree not empty){
      Preorder-Traverse(left subtree);
      Preorder-Traverse(right subtree);
}
```

left subtree => E,S,I,L right subtree => D,A
ie E,S,I,L,F,D,A

CHARACTERS IN STRING

```
function myFunction(string1, string2) {
    var firstString = string1;
    var secondString = string2;
    var res="";
    for(var i = 0; i<firstString.length; i++){
        res += firstString.charAt(i);
    }
    return res.concat(secondString);
}
```

ARRAY COMPACTION

```
var uniqueArray = duplicatesArray.filter(function(elem,pos,arr){
  return arr.sort().indexOf(elem) == pos;
}
```

ROTATING AN ARRAY

```
ffunction arr(theArray){
  if(theArray.length > 2 && theArray instanceof Array){
    var temp1 = theArray[theArray.length-1];
    var temp2 = theArray[theArray.length-2];
    for(var i =0; i<2; i++){
     theArray.pop();
    }
    theArray.unshift(temp2,temp1);
    return theArray;
  }
}
```