

## 笔试题

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1. 有一个扁平的数组描述了一系列的地理信息，类似于：

```
var locationList = [  
  { id: 0, name: "中国" },  
  { id: 1, pid: 0, name: "广东省" },  
  { id: 2, pid: 1, name: "深圳市" },  
  { id: 3, pid: 1, name: "广州市" },  
  ...  
]
```

其中每个节点的 `pid` 指向了它所属上级地区。现在要求你把这个数组转换成树状结构：

```
var locationTree = buildLocationTree(locationList);  
console.log(locationTree);
```

其中 `locationTree` 的结构应该如下：

```
interface LocationTree {  
  root: LocationNode;  
}  
interface LocationNode {  
  id: number;  
  pid?: number; // 问号表示可选属性  
  name: string;  
  subLocations?: LocationNode[];  
}
```

请实现 `buildLocationTree()`，输出的父节点里面包含子节点的数组



2、有10000条消息，每个消息timestamp字段，请排序(不可以使用sort函数)

[{"eventId":2498858,"timestamp":1463569008327,"user":"auto"},.....]

3、请用正则表达式精确匹配出字符传中的uin （数字）

```
var cookie = 'PHPSESSID=0kvneb776baqhf58o2tm2c94e5; pgv_pvi=9051466752; pgv_si=s7186281472;  
qcloud_visitId=a4855986717854a66aa83f24d3354709; qcloud_uid=6d95ce375053a1b31d00fce7af9ba02c;  
pv_uid=257127f177879f702fe6ef94b9d76cb2;pv_land=http%3A%2F%2Fpassport.qcloud.com%2Findex.php  
;  
_ga=GA1.2.516642758.1463555939;monitorouin=1e19%2BwNnG39Skt0uEiG%2FuMZCqIknLcLH6qt0aj0x  
ngVjhx7jWWVKewYVkBnbC0PmF4I;monitorappid=8af3cU8qz4kqPoYzLCGRXhLcHpW2w%2BACTZuwj  
aw%2Fh2PMUBz0yIgdTMG5S5guq7qSygo;ptui_loginuin=3052202501%20;pt2gguin=o3052202501;uin=o3  
052202501;ptisp=ctc;ptcz=9aa1cf3992c8ed2b581f04d51333f0f0b79adfc74e494daa5ad73703d16f93ff;userinfo  
=reg%3D1%26un%3Dpolo;nodesess=s%3AO2gAWpD7S4wN9gAu2rYM2Xvf.wq26bg5tscM%2F3X9FEpx8  
6K0rzF5w%2BbDRetkKugR19I0; nick=polo; appid=1251000011; moduleId=1251000011;  
ownerUin=2407912486; regionId=1'
```