

查找 4个 ``cpp //折半查找

```
int Bsearch(int R[], int low, int high, int k){ int mid; while(low <= high) // 当子表长度大于等于1时进行循环 { mid = (low + high) / 2; if(R[mid] == k) return mid; else if(R[mid] > k) high = mid - 1; else low = mid + 1; } return 0; }
```

```
``cpp
```

```
// 索引查找 (分块查找)
```

```
// 第一步二分查找，第二步顺序查找
```

```
typedef struct{
```

```
    int key;          //假设表内元素为int型
```

```
    int low, high;    //记录某块中第一个和最后一个元素的位置
```

```
}indexElem;
```

```
indexElem index[maxSize]; // 定义索引表
```

//二叉排序树 查找

```
BTNode* BSTSearch(BTNode* bt, int key)
{
    if(bt == null)
        return null;
    else
    {
        if(bt->val == key)
            return bt;
        else if(key < bt->val)
            return BSTSearch(bt->left, key);
        else
            return BSTSearch(bt->right, key);
    }
}
```

//二叉排序树 插入

```
int BSTInsert(BTNode* bt, int key)
{
    if(bt == null)
    {
        BTNode* bt = new BTNode(key);
        return 1;
    }
    else
    {
        if(key == bt->val)
            return 0;
        else if(key < bt->val)
            BSTInsert(bt->left, key);
        else
            BSTInsert(bt->right, key);
    }
}
```