

# factorial

```
1 int factorial(int n)
2 {
3     if (n<2)
4         return 1;
5
6     return n*factorial(n-1);
7 }
```

## factorial with ternary operator

```
1 int factorial(int n)
2 {
3     return (n<2) ? 1 : n*factorial(n-1);
4 }
```

ternary  $\text{ans} = a \ \& \ b : c$

```
1  if (a)
2      ans=b;
3  else
4      ans=c;
```

## binary search with recursion 1

```
1 int search(int a[],int n, int val)
2 {
3     return find_r(a,val,0,n-1);
4 }
```

## binary search with recursion 2

```
5  int find_r(int a[],int val,int low,int high)
6  {
7
8      if(high<low)
9          return -1;
10
11     int mid=(high+low)/2;
12
13     if(a[mid]==val)
14         return mid;
15
16     if(val>a[mid])
17         return find_r(a,val,mid+1,high);
18
19     return find_r(a,val,low,mid-1);
20 }
```