Lec-26

```
public static int fact(int n) {
    // Base case
    if (n == 0) {
        return 1;
    }
    int fn = fact(n - 1);// sp
    return fn * n;

}
```

```
public static int pow(int a, int n) {
    if(n==0) {
        return 1;
    }
    int f = pow(a, n - 1);// sp
    return f * a;
}
```

```
public static int Index(int[] arr, int item, int idx) {
    if idx == arr.length {
        return -1;
    }

    if arr[idx] == item) {
        return idx;
    }
    return Index(arr, item, idx + 1);
}
```

```
public static int fib(int n) {
    if (n == 0 || n == 1) {
        return n;
    }
    int f1 = fib(n - 1);
    int f2 = fib(n - 2);
    return f1 + f2;
}
```

```
public static int pow(int a, int n) {
    if (n == 0) {
        return 1;
    }
    int ans = pow(a, n / 2);
    ans = ans * ans;
    if (n % 2 == 1) {
        ans = ans * a;
    }
    return ans;
}
```

```
public static int fact(int n) {
    // Base case
    if (n == 0) {
        return 1;
    }
    int fn = fact(n - 1);// sp
    return fn * n;
}
```

```
public static int fib(int n) {
    if (n == 0 || n == 1) {
        return n;
    }
    int f1 = fib(n - 1);
    int f2 = fib(n - 2);
    return f1 + f2;
}
```