Lec-43
06/05/25 1:10 PM

> Those who cannot remember the past are condemned to repeat it.
>
> — George Santayana

```
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 fibTD(int n, int[] dp) {
    if (n == 0 || n == 1) {
        return n;
    }
    if (dp[n] != 0) {// dp apply kra hai
        return dp[n];
    }
    int f1 = fibTD(n - 1, dp);
    int f2 = fibTD(n - 2, dp);
    return dp[n] = f1 + f2;// yaad kra hai
}
```

```
public static int Robber(int[] arr, int i) {
    if (i >= arr.length) {
        return 0;
    }
    int rob = arr[i] + Robber(arr, i + 2);
    int Dont_rob = Robber(arr, i + 1);

    return Math.max(rob, Dont_rob);
}
```