

L6. Recursion on Subsequences X PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzIn_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

Point all Subsequences → a contiguous non-contiguous sequences , which follows the order.

arr → [3, 1, 2] n = 3

3 2 1

3 → ✓
3 ✓
1 ✓
2 ✓
3 1 ✓
1 2 ✓
3 2 ✓
3 1 2 ✓

8

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

PARAMETERISED AND FUNCTIONAL RECURSION 3 18:14 Re 3. Parameterised and Functional Recursion | Strivers...

PROBLEMS ON FUNCTIONAL 1 Re 4. Problems on Functional

30°C 8.1K 8.1K Thanks ENG IN 23:40 09-04-2023

Partly cloudy

Search

Join Subscribed

Share

Thanks

TUF take U forward 331K subscribers

Cloudy icon

Windows icon

Search icon

File icon

Firefox icon

Mail icon

Up arrow icon

Eng In icon

Wi-Fi icon

Speaker icon

Battery icon

1

L6. Recursion on Subsequences X PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzIn_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

PARAMETERISED AND FUNCTIONAL RECURSION 18:14

Re 3. Parameterised and Functional Recursion | Strivers...

take U forward

PROBLEMS ON FUNCTIONAL

Re 4. Problems on Functional

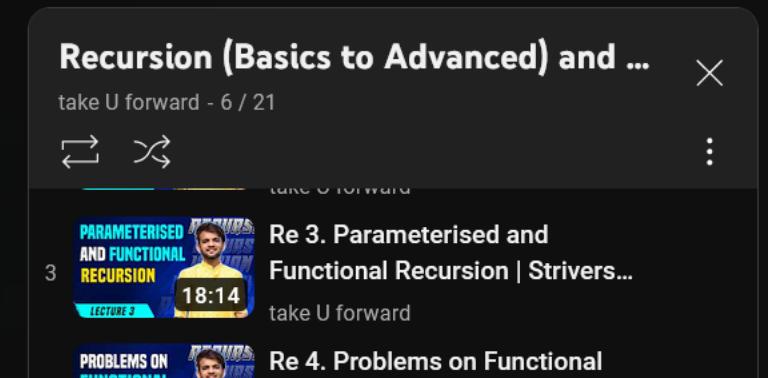
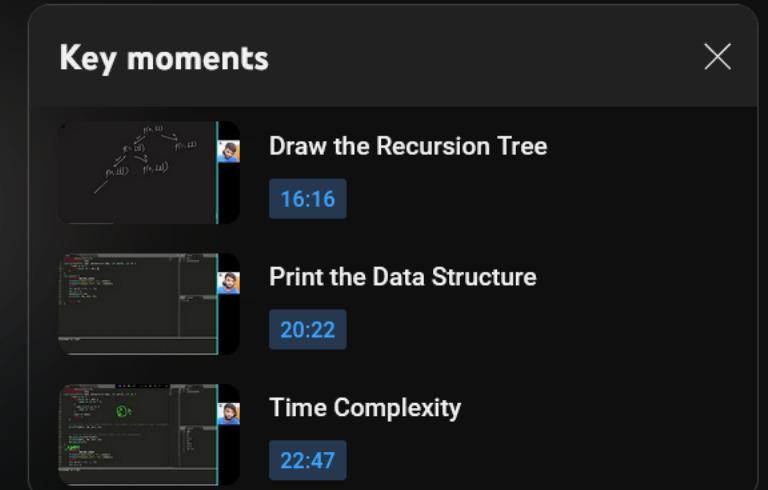
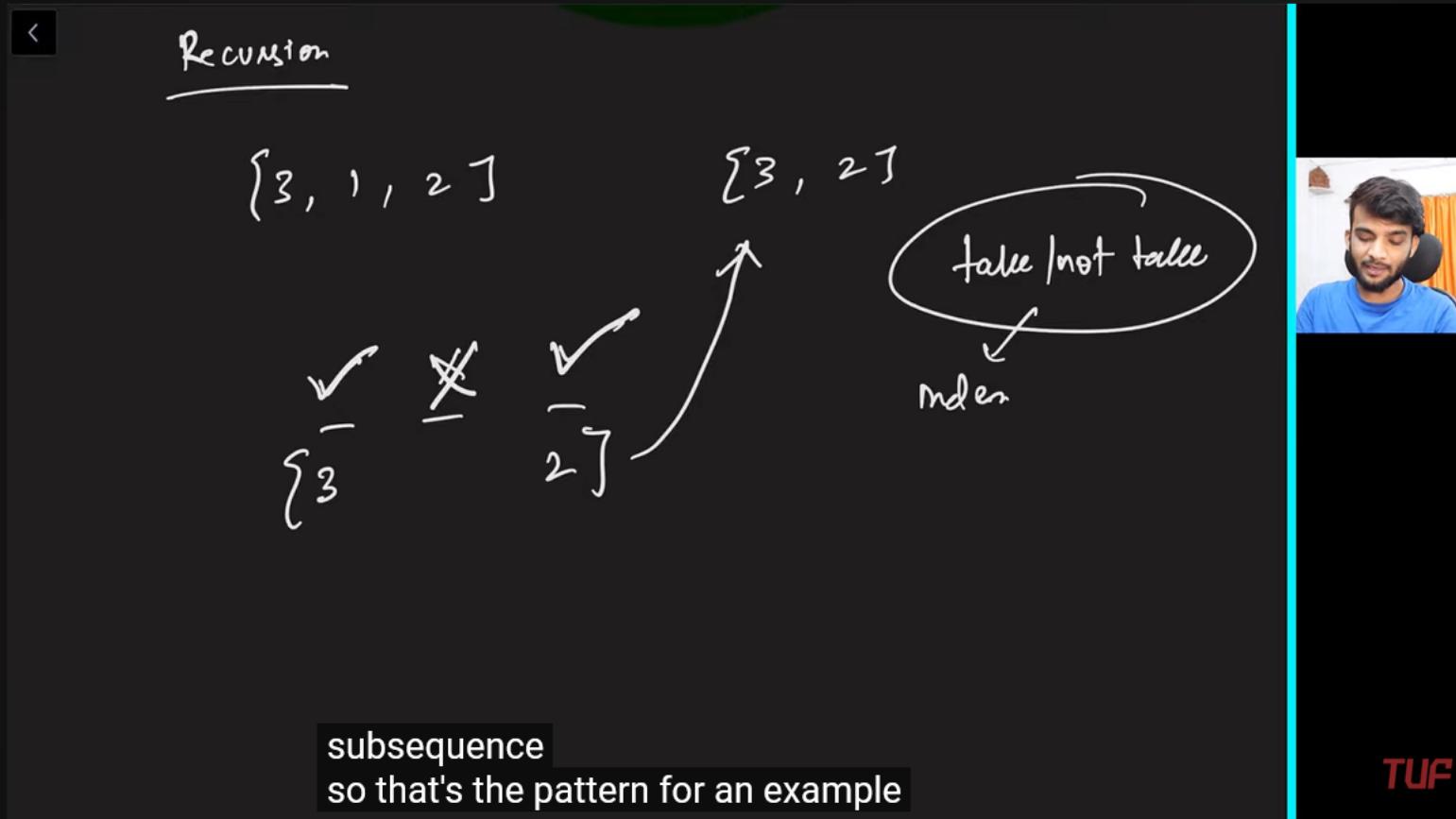
L6. Recursion on Subsequences | Printing Subsequences

take U forward 331K subscribers Join Subscribed 8.1K Share Thanks ...

30°C Partly cloudy

Search

23:41 ENG IN 09-04-2023 1



L6. Recursion on Subsequences x PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBIf0rGlzIn_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

Re 3. Parameterised and Functional Recursion | Strivers... 18:14

Re 4. Problems on Functional

options either i say that i'm gonna take it i'm not gonna take it so

L6. Recursion on Subsequences | Printing Subsequences

take U forward 331K subscribers Join Subscribed 8.1K Share Thanks ...

30°C 30°C Partly cloudy

Search

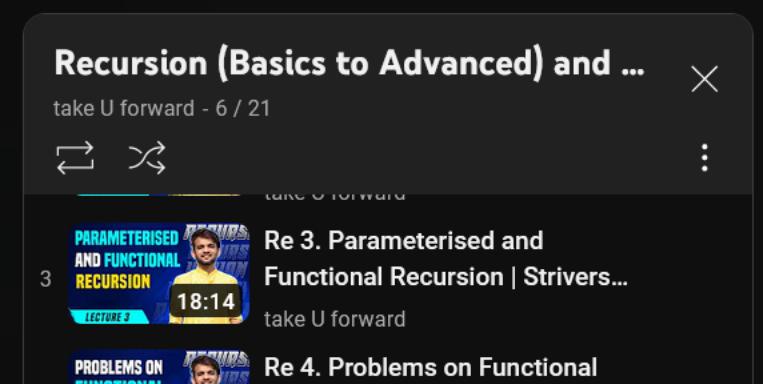
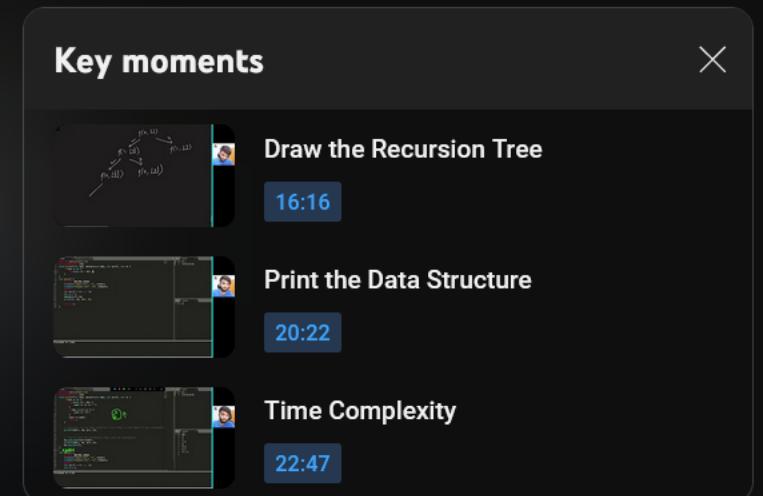
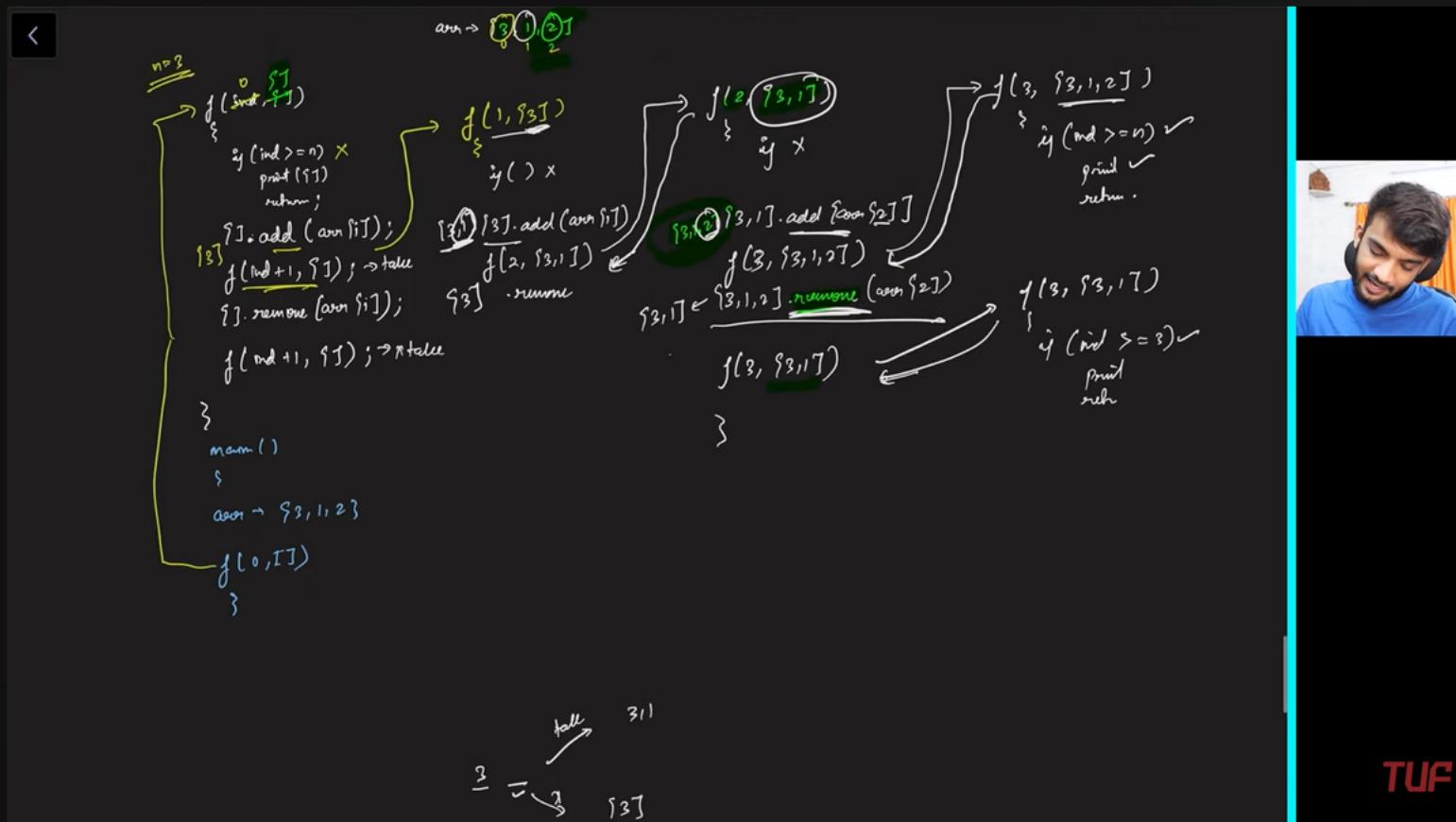
23:43 ENG IN 09-04-2023 1

The hand-drawn diagram on the left side of the video player shows several sequences of numbers with checkmarks and X's indicating whether they are included or excluded from a subsequence. The sequences are:

- $\{3\}$: A checkmark under 3.
- $\{2\}$: An X over 2.
- $\{1\}$: A checkmark under 1.
- $\{3, 2\}$: A checkmark under 3, an X over 2.
- $\{3, 1\}$: A checkmark under 3, an X over 1.
- $\{2, 1\}$: A checkmark under 2, an X over 1.
- $\{\}$: Three X's over 3, 2, and 1.

A handwritten note 'Index' with an arrow points to the number 2 in the sequence $\{3, 2\}$.

take u forward recursion



L6. Recursion on Subsequences x

PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzln_7rsaR2FQ5e6ZOL9&index=6 90%

take u forward recursion

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

Re 3. Parameterised and Functional Recursion | Strivers... 18:14

take U forward

Re 4. Problems on Functional

take u forward recursion

take u forward

Subscribed 331K subscribers

Join

8.1K

Share

Thanks

30°C Partly cloudy

Search

ENG IN

23:54 09-04-2023 1

L6. Recursion on Subsequences x

PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzln_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

PARAMETERISED AND FUNCTIONAL RECURSION 3 18:14

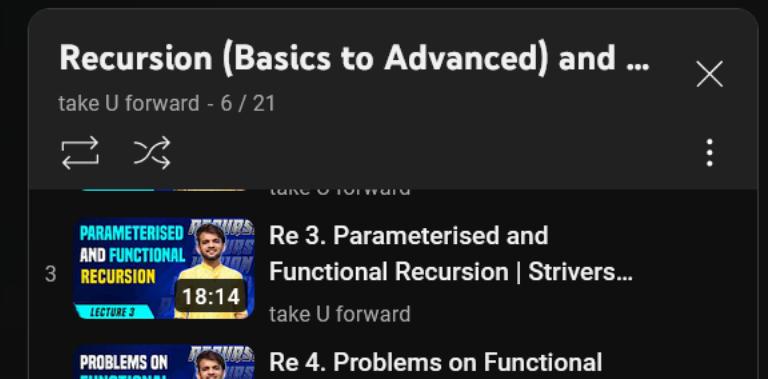
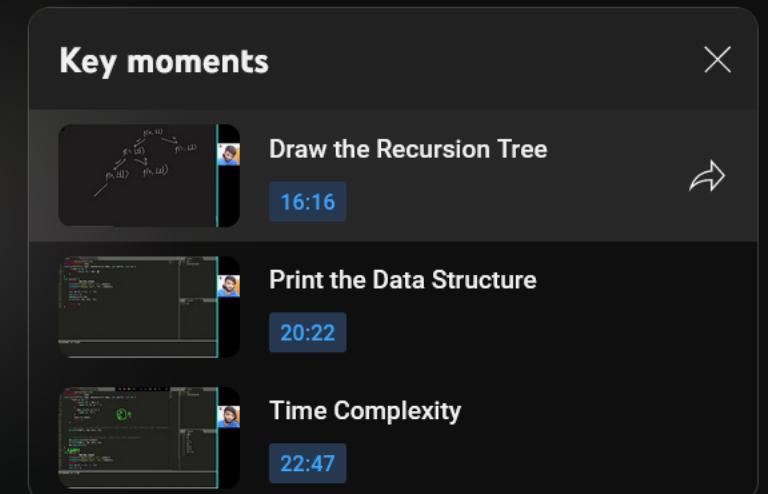
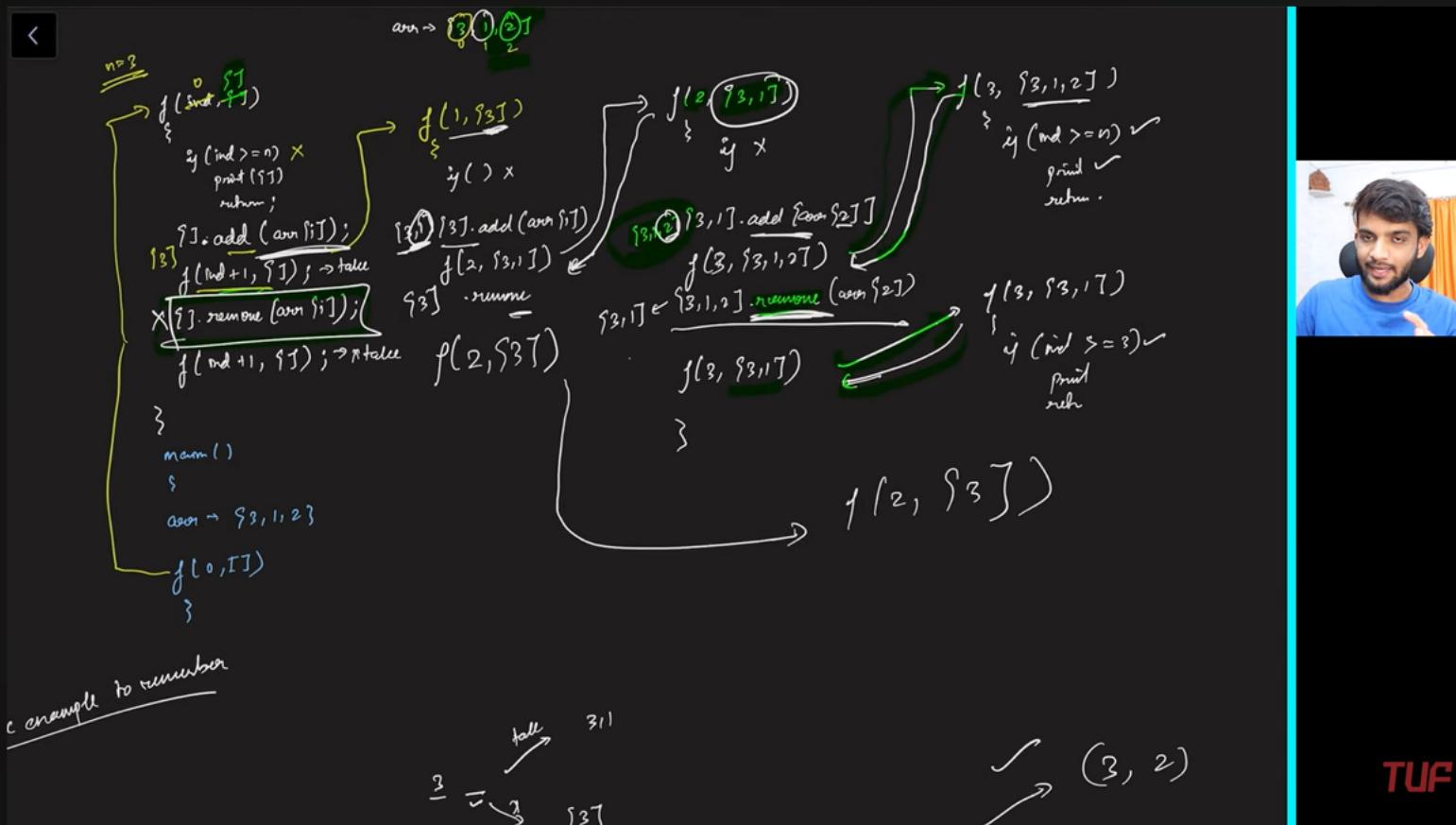
Re 3. Parameterised and Functional Recursion | Strivers...

take U forward

PROBLEMS ON FUNCTIONAL 1 Re 4. Problems on Functional

30°C ENG IN 23:56
Partly cloudy 09-04-2023 1

take u forward recursion



L6. Recursion on Subsequences X PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzIn_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

code.cpp stdc++.h

```
1 #include<bits/stdc++.h>
2 using namespace std;
3 void printf(int ind, vector<int> &ds, int arr[], int n) {
4     if(ind == n) {
5         for(auto it : ds) {
6             cout << it << " ";
7         }
8         if(ds.size() == 0) {
9             cout << "{}";
10        }
11        cout << endl;
12        return;
13    }
14    // take or pick the particular index into the subsequence
15    ds.push_back(arr[ind]);
16    printf(ind+1, ds, arr, n);
17    ds.pop_back();
18
19    // not pick, or not take condition, this element is not added to your subsequence
20    printf(ind+1, ds, arr, n);
21 }
22 int main() {
23     #ifndef ONLINE_JUDGE
24     freopen("input.txt", "r", stdin);
25     freopen("output.txt", "w", stdout);
26     #endif
27     int arr[] = {3, 1, 2};
28     int n = 3;
29     vector<int> ds;
30     printf(0, ds, arr, n);
31 }
```

input.txt

1	5
2	1 2 3 4 5

output.txt

1	3 1 2
2	3 1
3	3 2
4	3
5	1 2
6	1
7	2
8	{}
9	

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

PARAMETERISED AND FUNCTIONAL RECURSION 18:14

Re 3. Parameterised and Functional Recursion | Strivers...

take U forward

PROBLEMS ON FUNCTIONAL 18:14

Re 4. Problems on Functional

take U forward

take U forward

30°C 8.1K 1 Join Subscribed Search Share Thanks ...

Partly cloudy

ENG IN 23:57 09-04-2023 1

L6. Recursion on Subsequences X PLAYING

https://www.youtube.com/watch?v=AxNNVECc8c&list=PLgUwDviBlf0rGlzln_7rsaR2FQ5e6ZOL9&index=6 90% ⚡

take u forward recursion

code.cpp

```
7     }
8     if(ds.size() == 0) {
9         cout << "{}";
10    }
11    cout << endl;
12    return;
13 }

// not pick, or not take condition, this element is not added to your subsequence
14 printf(ind+1, ds, arr, n);

15 // take or pick the particular index into the subsequence
16 ds.push_back(arr[ind]);
17 printf(ind+1, ds, arr, n);
18 ds.pop_back();

19 }
20 int main() {
21 #ifndef ONLINE_JUDGE
22     freopen("input.txt", "r", stdin);
23     freopen("output.txt", "w", stdout);
24 #endif
25     int arr[] = {3, 1, 2};
26     int n = 3;
27     vector<int> ds;
28     printf(0, ds, arr, n);
29
30     return 0;
31 }
```

input.txt

```
1 5
2 1 2 3 4 5
```

output.txt

```
1 {}
2 2
3 1
4 1 2
5 3
6 3 2
7 3 1
8 3 1 2
9
```

Key moments

- Draw the Recursion Tree 16:16
- Print the Data Structure 20:22
- Time Complexity 22:47

Show chat replay

Recursion (Basics to Advanced) and ...

take U forward - 6 / 21

PARAMETERISED AND FUNCTIONAL RECURSION 3 18:14

Re 3. Parameterised and Functional Recursion | Strivers... take U forward

PROBLEMS ON FUNCTIONAL 1 Re 4. Problems on Functional

30°C 8.1K 8.1K Subscribed Join Share Thanks ...

Partly cloudy

Search

23:57 ENG IN 09-04-2023 1