

THEORY ASSIGNMENT

LIST AND KEY

Question 1: How do you render a list of items in React? Why is it important to use keys when rendering lists?

Answer:

In React, you render a list by using the `.map()` function to loop through an array and return JSX for each item.

➤ **Example:**

```
const fruits = ['Apple', 'Banana', 'Mango'];
```

```
return (
```

```
<ul>
```

```
  {fruits.map((fruit, index) => (
```

```
    <li key={index}>{fruit}</li>
```

```
  )))
```

```
</ul>
```

```
);
```

Why use keys?

- Keys help React **identify which items changed, added, or removed**.
- They make the list rendering more **efficient and stable** during updates.

Question 2: What are keys in React, and what happens if you do not provide a unique key?

Answer:

Keys are unique identifiers (usually id or index) given to elements in a list. Example:
`key={user.id}`

If you don't provide a unique key:

- React **may re-render items incorrectly**.

- It can cause **bugs in dynamic lists** like animations, form inputs, etc.
- React will also show a **warning** in the console:
"Each child in a list should have a unique "key" prop."