

Remove duplicates from string

Methods :

- (1) Use 2 for loops . $O(n^2)$: Time .
- (2) Use sorting . Arrays. sort(a) . Time : $O(n \log n)$
- (3) Use LinkedHashSet : Time : $O(n)$, Space : $O(n)$

```
public String removeDuplicates ( String input ) {
```

```
    if ( input == null || input.length () == 0 ) return null;
```

```
    char [ ] chars = input. toCharArray ( );
```

```
    Set < Character > s = new LinkedHashSet < > ( );
```

```
    String Builder sb = new String Builder ( );
```

```
    for ( Character c : chars )
```

```
        if ( s.add ( c ) ) sb.append ( c );
```

```
String Builder sb = new String Builder ( );
```

```
for
```

```
return sb. toString ( );
```

```
{}
```