

# How to Remove Duplicates From a Python List

In this tutorial, we will learn how to remove duplicates from a Python list.

## Using dict.fromkeys()

```
In [1]: # Remove duplicates from a list using dict.fromkeys()

# List with duplicates
mylist = ["a", "b", "a", "c", "c"]

# Create a dictionary from the list items. This will automatically remove
# Then, convert the dictionary back to a list.
mylist = list(dict.fromkeys(mylist))

# This method has the same order as the original one.
print(mylist)
```

```
['a', 'b', 'c']
```

## Using set()

```
In [2]: # Remove duplicates from a list using set()

# List with duplicates
mylist = ["a", "b", "a", "c", "c"]

# Convert the list to a set. This will automatically remove any duplicate
# Then, convert the set back to a list.
mylist = list(set(mylist))

# This method does not preserve the order of the original list.
print(mylist)
```

```
['b', 'c', 'a']
```

## Using list comprehension

```
In [5]: # Remove duplicates from a list using list comprehension

# List with duplicates
mylist = ["a", "b", "a", "c", "c"]

# Create a new list with unique elements by checking if the element is not
mylist = [x for i, x in enumerate(mylist) if i == mylist.index(x)]

# This method has the same order as the original one.
print(mylist)
```

```
['a', 'b', 'c']
```

## Using a loop

```
In [6]: # Remove duplicates from a list using a loop

# List with duplicates
mylist = ["a", "b", "a", "c", "c"]

# Create a new list and add elements to it only if they are not already
newlist = []
for x in mylist:
    if x not in newlist:
        newlist.append(x)

# This method has the same order as the original one.
print(newlist)
```

```
['a', 'b', 'c']
```

Arsalan

```
In [ ]:
```

# How to reverse a string in Python

There is no built-in function to reverse a String in Python.

## using slicing

```
In [1]: # Reverse a string in Python

txt = "Hello World"
print(txt[::-1])
```

dlroW olleH

## using a loop

```
In [2]: # Reverse a string in Python

txt = "Hello World"
reversed_txt = ""
for i in txt:
    reversed_txt = i + reversed_txt
print(reversed_txt)
```

dlroW olleH

Arsalan

```
In [ ]:
```

# Adding two numbers

## Using + operator

```
In [1]: a = 10  
b = 20  
print(a + b)
```

30

## Using sum function

```
In [2]: a = 10  
b = 20  
print(sum([a, b]))
```

30

## taking in users input

```
In [5]: a = int(input("Enter first number: "))  
b = int(input("Enter second number: "))  
print(a,b,a + b)
```

10 20 30

Arsalan

```
In [ ]:
```