

How can I find the index of the maximum value in a list using Python?

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The process of finding the index of the maximum value in a list using Python involves using built-in functions or methods such as "max()" and "index()". The "max()" function is used to find the maximum value in a given list, while the "index()" method is used to retrieve the index of a specific element in a list. By combining these two functions, one can easily find the index of the maximum value in a list. This approach is efficient and time-saving, making it a popular method among Python programmers.

Python: Find Index of Max Value in List

You can use the following syntax to find the index of the max value of a list in Python:

```
#find max value in list
```

```
max_value = max(list_name)
```

```
#find index of max value in list
```

```
max_index = list_name.index(max_value)
```

The following examples show how to use this syntax in practice.

Example 1: Find Index of Max Value in List

The following code shows how to find the max value in a list along with the index of the max value:

```
#define list of numbers
```

```
x =
```

```
#find max value in list
```

```
max_value = max(x)
```

```
#find index of max value in list
```

```
max_index = x.index(max_value)
```

```
#display max value
```

```
print(max_value)
```

```
22
```

```
#display index of max value
```

```
print(max_index)
```

```
2
```

The maximum value in the list is 22 and we can see that it's located at index value 2 in the list.

Note: Index values start at 0 in Python.

Example 2: Find Index of Max Value in List with Ties

The following code shows how to find the max value in a list along with the index of the max value when there are *multiple* max values.

#define list of numbers with multiple max values

x =

#find max value in list

max_value = max(x)

#find indices of max values in list

indices =

#display max value

print(max_value)

22

#display indices of max value

print(indices)

The maximum value in the list is 22 and we can see that it occurs at index values 2 and 9 in the list.