

Find Median of List in Python

Sometimes, while working with Python list we can have a problem in which we need to find Median of list. This problem is quite common in the mathematical domains and generic calculations. Let's discuss certain ways in which this task can be performed.

Method #1 : Using loop + "~" operator

This task can be performed in brute force manner using the combination of above functionalities. In this, we sort the list and then by using the property of "~" operator to perform negation, we access the list from front and rear, performing the required computation required for finding median.

filter_none

edit

play_arrow

brightness_4

```
# Python3 code to demonstrate working of
# Median of list
# Using loop + "~" operator

# initializing list
test_list = [4, 5, 8, 9, 10, 17]

# printing list
print("The original list : " + str(test_list))

# Median of list
# Using loop + "~" operator
test_list.sort()
mid = len(test_list) // 2
res = (test_list[mid] + test_list[~mid]) / 2

# Printing result
print("Median of list is : " + str(res))
```

Output :

```
The original list : [4, 5, 8, 9, 10, 17]
Median of list is : 8.5
```

Method #2 : Using statistics.median()

This is the most generic method to perform this task. In this we directly use inbuilt function to perform the median of the list.

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```
# Python3 code to demonstrate working of
# Median of list
# Using statistics.median()
import statistics

# initializing list
test_list = [4, 5, 8, 9, 10, 17]

# printing list
print("The original list : " + str(test_list))

# Median of list
# Using statistics.median()
res = statistics.median(test_list)

# Printing result
print("Median of list is : " + str(res))
```

Output :

```
The original list : [4, 5, 8, 9, 10, 17]
Median of list is : 8.5
```