

1 Function get_max that return to maximum number of the list

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In [28]: def get_max(list1):  
         max_val = max(list1)  
         return max_val  
  
list1 = [3,1,4,1,5,9]  
max_val = get_max(list1)  
print(max_val)
```

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2 Function get_unique that return to the number of unique values and list containing all unique values ¶

```
In [27]: def get_unique(list1):  
         n_unique = (list1[4])  
         list_unique = list(set(list1))  
         return n_unique, list_unique  
  
list1 = [3,1,4,1,5,9]  
n_unique, list_unique = get_unique(list1)  
print(n_unique)  
print(list_unique)
```

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[1, 3, 4, 5, 9]

3 Class DataHandler

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In [112]: class DataHandler:

    def __init__(self, self_item):

        self.list = self_item

    def shape(self):
        data.shape = len(list1)
        return data.shape

    def mean(self):
        data.mean = sum(list1)/len(list1)
        return data.mean

    def variance(self):
        data.variance = sum((i - data.mean)**2 for i in list1)/len(list1)
        return data.variance

    def std(self):
        data.std = math.sqrt(data.variance)
        return data.std
```

```
In [114]: list1 = [3,1,4,1,5,9]
data = DataHandler(list1)
print(data.shape())
print(data.mean())
print(data.variance())
print(data.std())
```

```
6
3.8333333333333335
7.472222222222221
2.733536577809454
```

In []:

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