Find the maximum of a list of numbers

› Aim:

To write a program to find the maximum of a list of numbers.

› Equipment's required:

1. Hardware – PCs
2. Anaconda – Python 3.7 Installation / Moodle-Code Runner

› Algorithm:

1. Get the list of marks as input
2. Use the sort() function or max() function or use the for loop to find the maximum mark.
3. Return the maximum value

› Program:

i) # To find the maximum of marks using the list method sort.

```
def max_marks(marks):
    #Write your code here
    marks.sort()
    large =marks[-1]
    return(large)
max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89])
```

ii) # To find the maximum marks using the list method max().

```
def max_marks(list1):
    # write your code here
    max1=list1[0]
    for i in list1:
        if i>max1:
            max1=i
    return max1
```

iii) # To find the maximum marks without using builtin functions.

```python
def max_marks(marks):
    a=max(marks)
    return a
```

Output:

Write a program to mark the maximum of marks using the list method **sort.**

For example:

Test	Result
print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95
print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98

Answer: (penalty regime: 0. %)

Reset answer

```
1    '''
2    Program to mark the maximum of marks using the list method sort
3    Developed by:B.Pavizhi
4    RegisterNumber: 21500608
5    '''
6    def max_marks(marks):
7        #Write your code here
8        marks.sort()
9        large =marks[-1]
10       return(large)
11   max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89])
12
```

	Test	Expected	Got	
✔	print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95	95	✔
✔	print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98	98	✔

Passed all tests! ✔

Write a program to find the maximum marks using the list method max().

For example:

Test	Result
print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95
print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98

Answer: (penalty regime: 0. %)

Reset answer

```
1   '''
2   Program to find the maximum marks using the list method max().
3   Developed by:B.Pavizhi
4   RegisterNumber:21500608
5   '''
6   def max_marks(list1):
7       # write your code here
8       max1=list1[0]
9       for i in list1:
10          if i>max1:
11              max1=i
12      return max1
13
```

	Test	Expected	Got	
✔	print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95	95	✔
✔	print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98	98	✔

Passed all tests! ✔

Write a program to find the maximum marks without using builtin functions.

For example:

Test	Result
print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95
print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98

Answer: (penalty regime: 0. %)

Reset answer

```
1   '''
2   Program to the maximum marks without using builtin functions.
3   Developed by: B.Pavizhi
4   RegisterNumber: 21500608
5   '''
6   def max_marks(marks):
7       a=max(marks)
8       return a
9
```

	Test	Expected	Got	
✔	print(max_marks([88, 67, 77, 93, 95, 11, 67, 89, 56, 89]))	95	95	✔
✔	print(max_marks([80, 60, 70, 90, 98, 65, 50, 89, 75, 85]))	98	98	✔
✔	print(max_marks([81, 63, 74, 92, 100, 66, 50, 89, 75, 87]))	100	100	✔

Passed all tests! ✔

Result:

Thus the program to find the maximum of given numbers from the list is written and verified using python programming.