

Problem 2: Given a row-wise sorted matrix of size $r \times c$, where r is no. of rows and c is no. of columns, find the median in the given matrix.

```
def find_median(matrix):  
    rows, cols = len(matrix), len(matrix[0])  
  
    arr = []  
  
    for i in range(rows):  
        for j in range(cols):  
            arr.append(matrix[i][j])  
  
    arr.sort()  
    middle_idx = len(arr) // 2  
    median = arr[middle_idx]
```

```
    return median
```

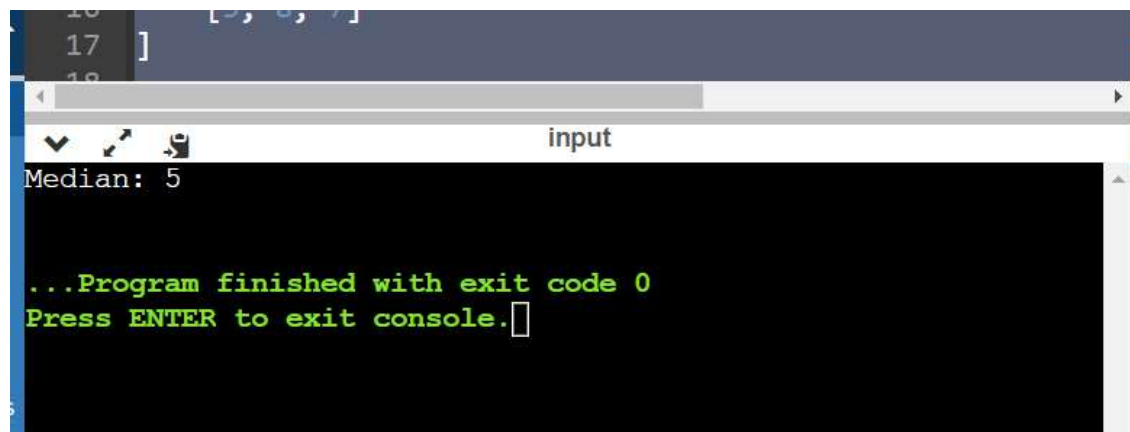
```
matrix = [  
    [1, 4, 9],  
    [2, 5, 6],  
    [3, 8, 7]
```

```
]
```

```
]
```

```
median = find_median(matrix)
```

```
print("Median:", median)
```



The screenshot shows a terminal window with a dark background. At the top, there's a header bar with some icons and the word "input". Below that, the text "Median: 5" is displayed. Further down, in green text, it says "...Program finished with exit code 0" and "Press ENTER to exit console." followed by a cursor icon. The terminal window is part of a larger application, with some other windows visible in the background.