1.إذا أردت أن تتفاوض على راتبك بشكل أفضل يجب أن تكون على معرفة جيدة بسوق العمل، فمن أجل معرفة أفضل عن رواتب المبرمجين قمنا بتجميع بعض البيانات عن رواتبهم والتي ستجدها بالأسفل، ومن أجل فهم السوق بشكل أفضل سنقوم بتصميم برنامجنا لكي يساعدنا ويجيب عن الأسئلة التالية

```
Maximum salary:        EGP
Top 5 salaries:                          EGP

-------------------
Minimum salary:     EGP

Bottom 5 salaries:                  EGP

-------------------
Average salary:    EGP
-------------------
Number of people with salary = 15,500 EGP:
```

```python
# salaries list
salaries = [
    64700, 23100, 81800, 31300, 35500, 84300, 25900,
    15500, 24500, 69000, 40100, 86100, 17000, 55800,
    17400, 15400, 93500, 30000, 68500, 70400, 60200,
    65500, 57100, 20800, 19500, 96200, 43400, 15500,
    36200, 16100, 21300, 63500, 83900, 85600, 40700,
    75700, 53700, 18400, 18400, 48800, 72300, 64600,
    77700, 97300, 64700, 53500, 34300, 76700, 41200,
    78300, 76000, 23600, 31800, 46800, 67600, 96700,
    60000, 33500, 96300, 65800, 80100, 59500, 78600,
    42500, 37700, 58800, 92300, 76000, 65300, 89600,
    22500, 98200, 99100, 38600, 42200, 16400, 17200,
    97600, 60500, 20800, 78500, 71100, 43700, 46500,
    51200, 87600, 68900, 85400, 44400, 53600, 91700,
    93200, 13300, 14200, 49500, 56600, 44400, 89700,
    21300, 100000, 63900, 78600, 61800, 50400, 39700,
    23100, 26300, 70700, 82700, 11400, 55000, 82900,
    54300,78300, 44900, 12600, 21500, 87500, 32200,
    47400, 13800, 54000, 11600, 68100, 94700, 51000,
    20800, 80100, 53700, 25000, 55900, 11700, 61300,
    93800, 72800, 46200, 39800, 96900, 66700, 55400,
    40600, 87000,93400, 74800, 84500, 17100, 38800,
    49100, 64000, 69200, 10540, 12300, 16900, 14500,
    105540, 21080, 12760, 19960, 13960, 14280, 12680,
    17000, 15960,12760, 113240, 17400, 15500, 15080,
    19240, 18360, 13480, 14120,17000, 11000, 11720,
    117400, 18840, 21100, 9480, 10440, 17560,11400,
    9640, 17000, 20360, 9720, 14040, 8792, 10200,
    13880, 11960
    ]
```

```python
# extra salary list
extra_salaries = [
    13300, 20500, 12100, 17200, 10600, 16600, 18100,
    17600, 20400, 12600, 12300, 18800, 15300, 14300,
    19800, 11500, 12500, 12700, 18300, 17800, 20500,
    13800, 20300, 11100, 15300, 11200, 18300, 12500,
    16800, 12100, 20200, 18700, 20100, 13700, 13400,
    19600, 19200, 15800, 10900, 19500, 13000, 17400,
    10600, 13900, 10800, 14800, 16600, 19200, 18300,
    14700, 19100, 12100, 12400, 16300, 13900, 15700,
    17700, 12100, 13000, 13700, 15300, 14800, 19400,
    13700, 18000, 11300, 14400, 20200, 17600, 19900,
    13300, 19100, 17400, 12400, 19200, 11100, 18700
    ]
```

يمكنك إذا لم تصل للإجابة، أن تحاول مرة أخرى بمساعدة الخطوات
التالية

```python
# make a new list with the salaries and extra_salaries

# sort the salaries


# calculate maximum salary

# Top 5 salaries


# calculate minimum salary

# Bottom 5 salaries


# average = total / number of salaries


# number of people with salary = 15500 using count list method


# print the results
```

{ codezilla }

```python
# salaries list
salaries = [
    64700, 23100, 81800, 31300, 35500, 84300, 25900,
    15500, 24500, 69000, 40100, 86100, 17000, 55800,
    17400, 15400, 93500, 30000, 68500, 70400, 60200,
    65500, 57100, 20800, 19500, 96200, 43400, 15500,
    36200, 16100, 21300, 63500, 83900, 85600, 40700,
    75700, 53700, 18400, 18400, 48800, 72300, 64600,
    77700, 97300, 64700, 53500, 34300, 76700, 41200,
    78300, 76000, 23600, 31800, 46800, 67600, 96700,
    60000, 33500, 96300, 65800, 80100, 59500, 78600,
    42500, 37700, 58800, 92300, 76000, 65300, 89600,
    22500, 98200, 99100, 38600, 42200, 16400, 17200,
    97600, 60500, 20800, 78500, 71100, 43700, 46500,
    51200, 87600, 68900, 85400, 44400, 53600, 91700,
    93200, 13300, 14200, 49500, 56600, 44400, 89700,
    21300, 100000, 63900, 78600, 61800, 50400, 39700,
    23100, 26300, 70700, 82700, 11400, 55000, 82900,
    54300,78300, 44900, 12600, 21500, 87500, 32200,
    47400, 13800, 54000, 11600, 68100, 94700, 51000,
    20800, 80100, 53700, 25000, 55900, 11700, 61300,
    93800, 72800, 46200, 39800, 96900, 66700, 55400,
    40600, 87000,93400, 74800, 84500, 17100, 38800,
    49100, 64000, 69200, 10540, 12300, 16900, 14500,
    105540, 21080, 12760, 19960, 13960, 14280, 12680,
    17000, 15960,12760, 113240, 17400, 15500, 15080,
    19240, 18360, 13480, 14120,17000, 11000, 11720,
    117400, 18840, 21100, 9480, 10440, 17560,11400,
    9640, 17000, 20360, 9720, 14040, 8792, 10200,
    13880, 11960
    ]


# extra salary list
extra_salaries = [
    13300, 20500, 12100, 17200, 10600, 16600, 18100,
    17600, 20400, 12600, 12300, 18800, 15300, 14300,
    19800, 11500, 12500, 12700, 18300, 17800, 20500,
    13800, 20300, 11100, 15300, 11200, 18300, 12500,
    16800, 12100, 20200, 18700, 20100, 13700, 13400,
    19600, 19200, 15800, 10900, 19500, 13000, 17400,
    10600, 13900, 10800, 14800, 16600, 19200, 18300,
```

```python
    14700, 19100, 12100, 12400, 16300, 13900, 15700,
    17700, 12100, 13000, 13700, 15300, 14800, 19400,
    13700, 18000, 11300, 14400, 20200, 17600, 19900,
    13300, 19100, 17400, 12400, 19200, 11100, 18700
    ]


# make a new list with the salaries and extra_salaries
all_salaries = salaries.copy()
all_salaries.extend(extra_salaries)

# sort the salaries
salaries_sorted = all_salaries[:]
salaries_sorted.sort(reverse=True)


# calculate maximum salary
max_salary = salaries_sorted[0]

# Top 5 salaries
top_5_salaries = salaries_sorted[:5]


# calculate minimum salary
min_salary = salaries_sorted[-1]

# Bottom 5 salaries
bottom_5_salaries = salaries_sorted[-5:]


# average = total / number of salaries
total_salary = sum(salaries_sorted)
number_of_salaries = len(salaries_sorted)

average_salary = total_salary / number_of_salaries


# number of people with salary = 15500
number_of_15500 = salaries_sorted.count(15500)
```

```python
# print the results
print(f'Maximum salary: {max_salary:,} EGP\n')
print(f'Top 5 salaries: {top_5_salaries} EGP\n')
print('-'*20)

print(f'Minimum salary: {min_salary:,} EGP\n')
print(f'Bottom 5 salaries: {bottom_5_salaries} EGP\n')
print('-'*20)

print(f'Average salary: {average_salary:,.0f} EGP')
print('-'*20)

print(f'Number of people with salary = 15,500 EGP: {number_of_15500:,}')
```