

```
In [1]: from cogs import calculate_cogs_score
        from salaries import calculate_salary_score
        from rent import calculate_rent_score
        from advertise import calculate_advertising_score
        from op_expenses import calculate_op_expenses_score
        from office_expenses import calculate_office_expenses_score
        from gp import calculate_gp_score
```

```
In [2]: ratio = 0.1
        print("ratio = ", ratio, " Salary Score = ", calculate_salary_score(ratio))
        print("ratio = ", ratio, " COGS Score = ", calculate_cogs_score(ratio))
        print("ratio = ", ratio, " Rent Score = ", calculate_rent_score(ratio))
        print("ratio = ", ratio, " Advertise Score = ", calculate_advertising_score(ratio))
        print("ratio = ", ratio, " OP Expenses Score = ", calculate_op_expenses_score(ratio))
        print("ratio = ", ratio, " Office Expenses Score = ", calculate_office_expenses_score(ratio))
        print("ratio = ", ratio, " GP Score = ", calculate_gp_score(ratio))
```

```
ratio = 0.1 Salary Score = 0
ratio = 0.1 COGS Score = 100
ratio = 0.1 Rent Score = 0
ratio = 0.1 Advertise Score = 70.71
ratio = 0.1 OP Expenses Score = 100
ratio = 0.1 Office Expenses Score = 0
ratio = 0.1 GP Score = 21.67955195232065
```

```
In [3]: import matplotlib.pyplot as plt

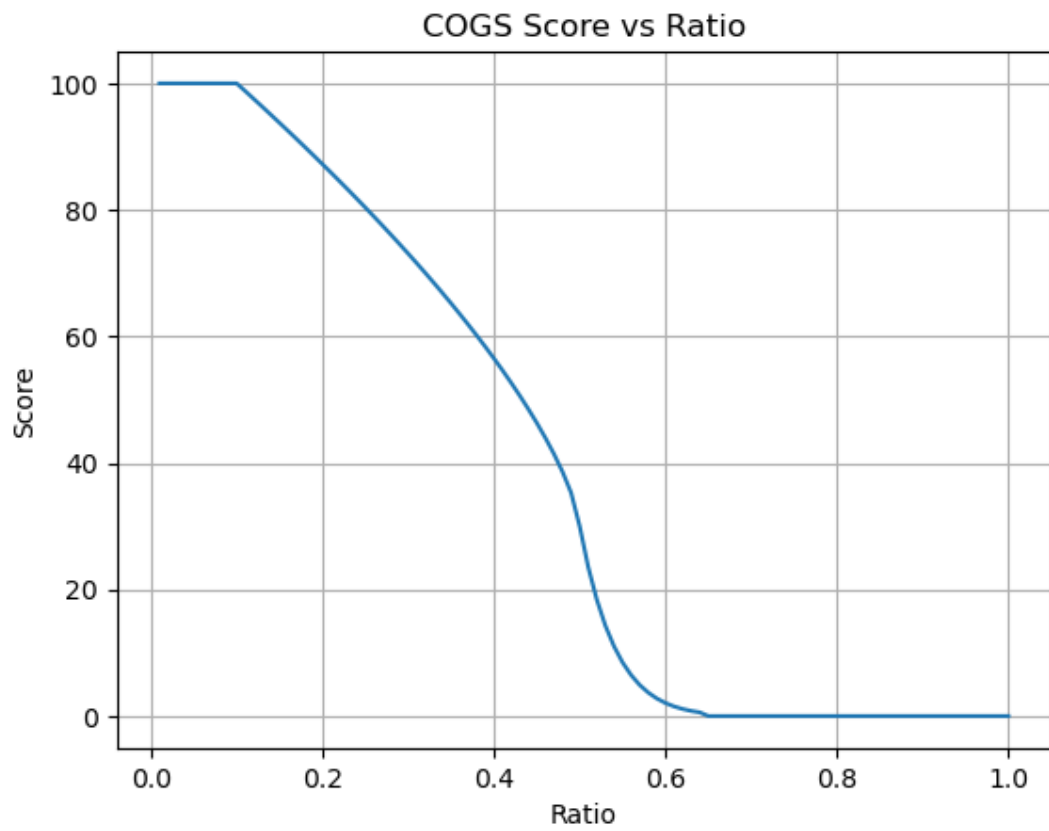
        # Generate data
        ratio = [0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.1, 0.11, 0.12, 0.13, 0.14, 0.15, 0.16, 0.17, 0.18, 0.19, 0.2]
```

Plots

```
In [ ]:
```

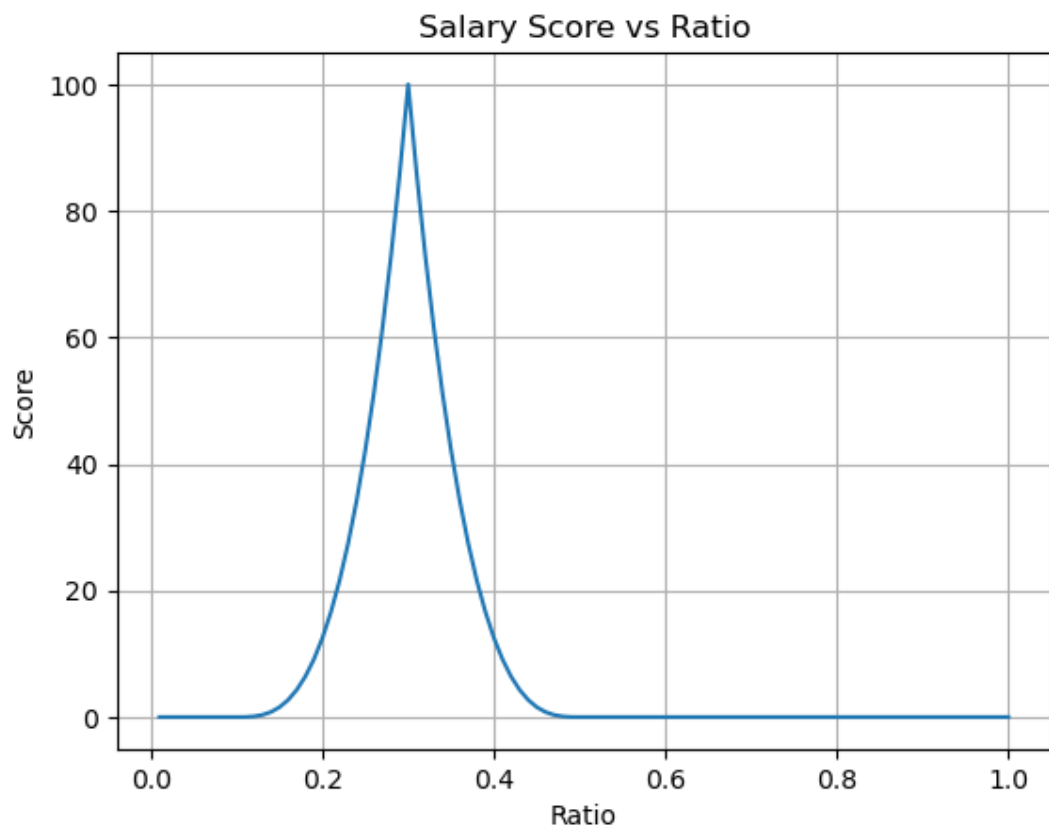
```
In [4]: scores = [calculate_cogs_score(r) for r in ratio]

        # Plot data
        plt.plot(ratio, scores)
        plt.xlabel("Ratio")
        plt.ylabel("Score")
        plt.grid(True)
        plt.title("COGS Score vs Ratio")
        plt.show()
```



```
In [5]: scores = [calculate_salary_score(r) for r in ratio]

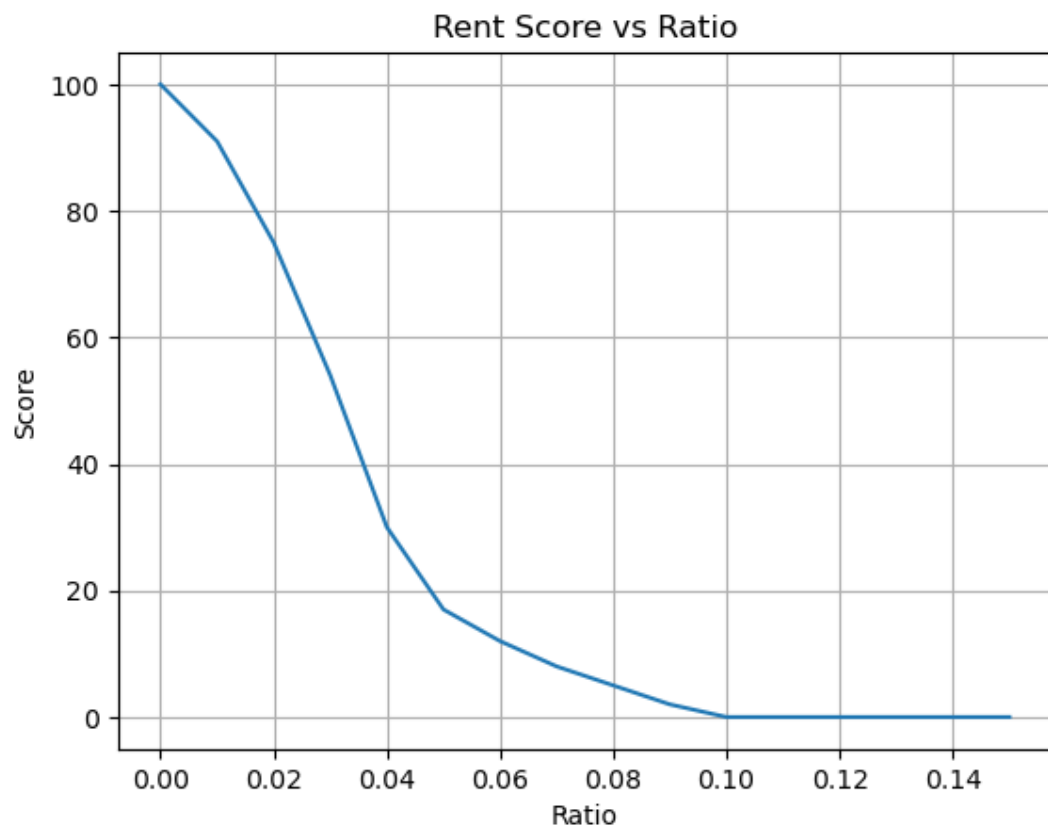
# Plot data
plt.plot(ratio, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("Salary Score vs Ratio")
plt.show()
```



In []:

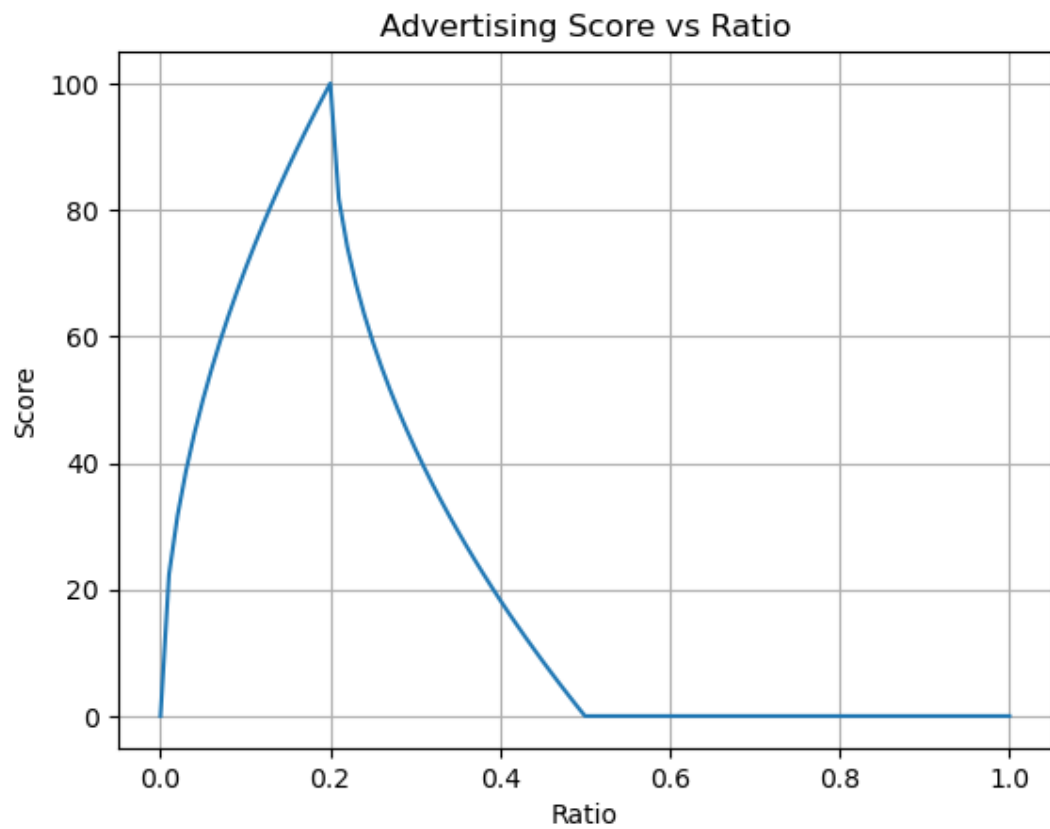
```
In [6]: ratio1 = [0,0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.1, 0.11, 0.12, 0.13, 0.14]
scores = [calculate_rent_score(r) for r in ratio1]

# Plot data
plt.plot(ratio1, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("Rent Score vs Ratio")
plt.show()
```



```
In [7]: ratio = [0,0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.1, 0.11, 0.12, 0.13, 0.14]
scores = [calculate_advertising_score(r) for r in ratio]

# Plot data
plt.plot(ratio, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("Advertising Score vs Ratio")
plt.show()
```

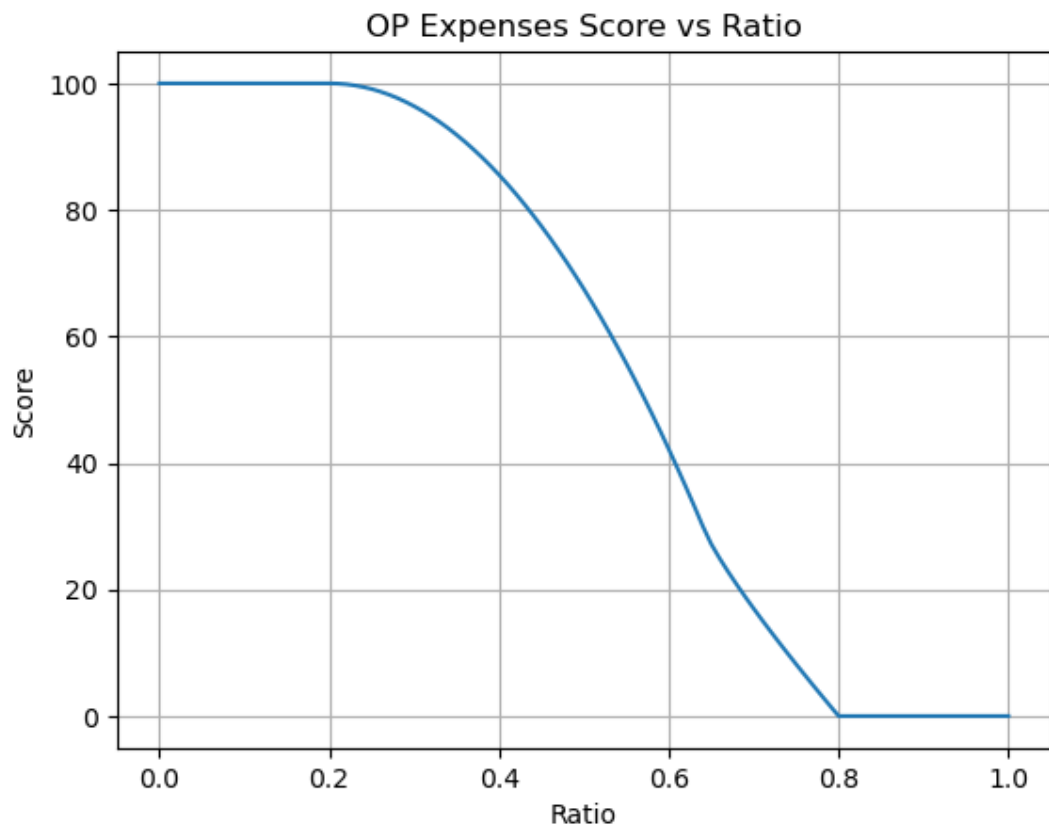


```
In [8]: calculate_advertising_score(0)
```

```
Out[8]: 0
```

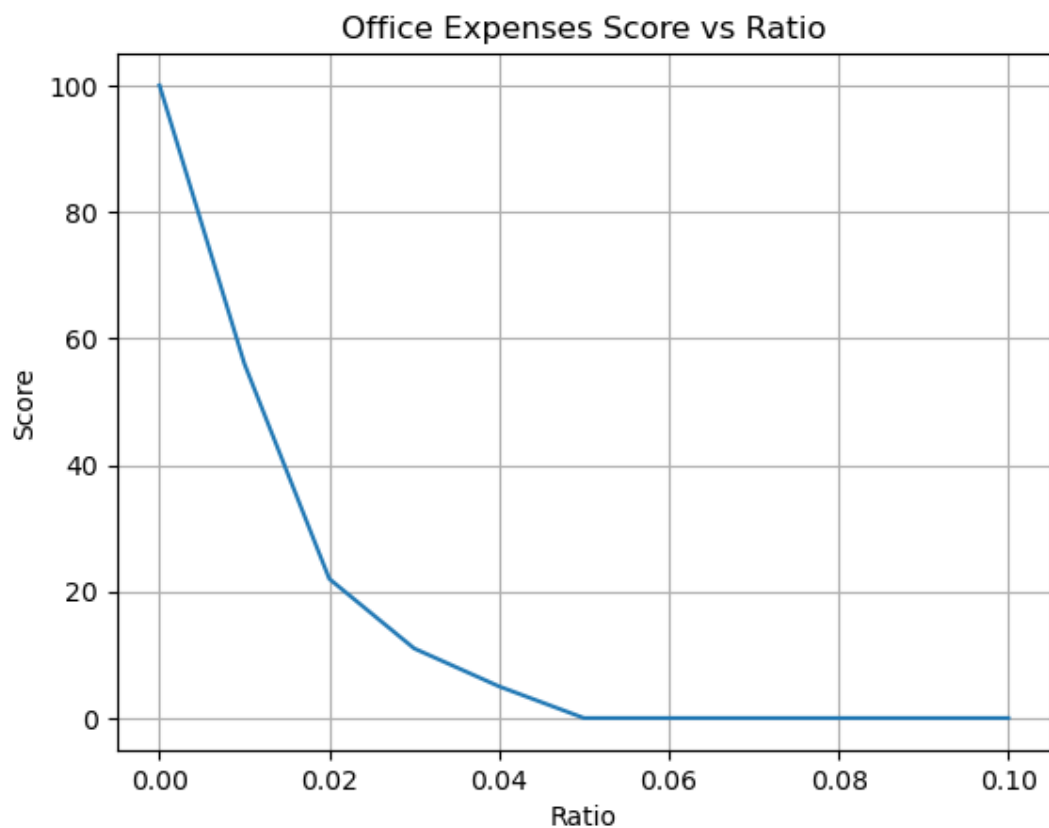
```
In [9]: scores = [calculate_op_expenses_score(r) for r in ratio]
```

```
# Plot data
plt.plot(ratio, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("OP Expenses Score vs Ratio")
plt.show()
```



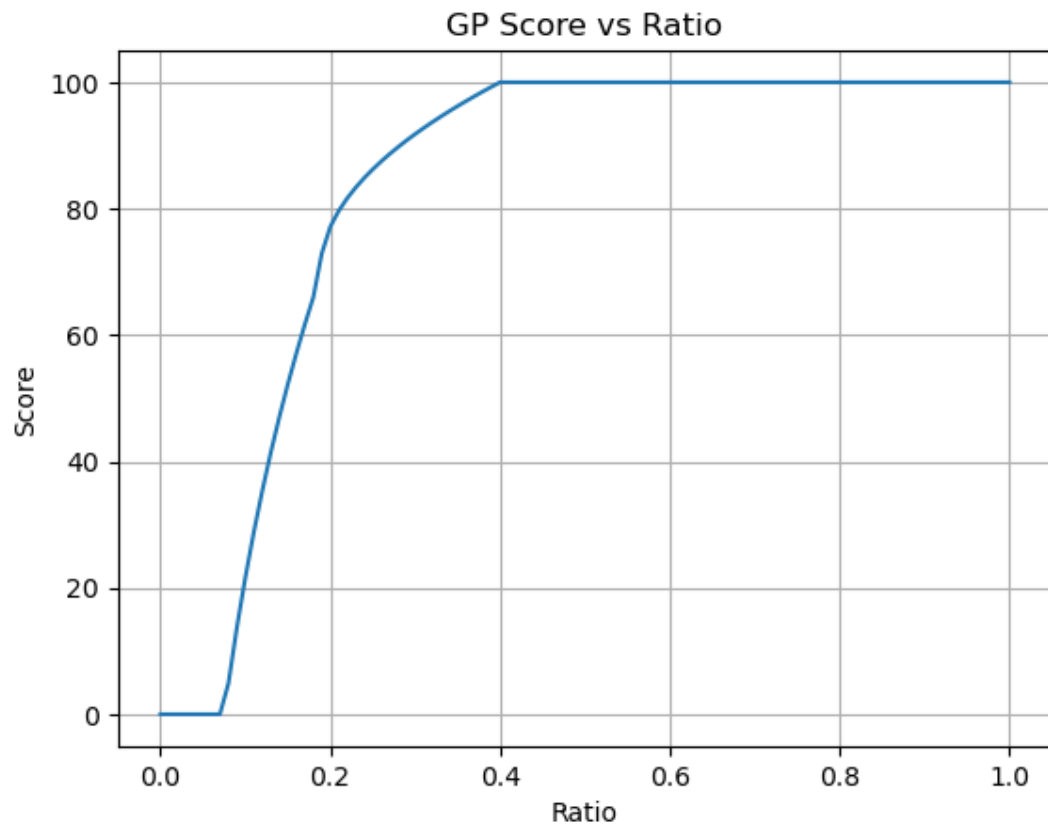
```
In [10]: ratio2 = [0, 0.01, 0.02, 0.03, 0.04, 0.05, 0.06, 0.07, 0.08, 0.09, 0.1]
         scores = [calculate_office_expenses_score(r) for r in ratio2]

# Plot data
plt.plot(ratio2, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("Office Expenses Score vs Ratio")
plt.show()
```



```
In [11]: scores = [calculate_gp_score(r) for r in ratio]

# Plot data
plt.plot(ratio, scores)
plt.xlabel("Ratio")
plt.ylabel("Score")
plt.grid(True)
plt.title("GP Score vs Ratio")
plt.show()
```



In []:

In []: