SET A

Exercise #5: Write a program which calculates and prints the monthly paycheck for an employee

The net salary is calculated after the following deductions and additions:

Deducations: Additions:

Retirement Plan: 5% Housing Allowence: 20% Health Insurance: 750 AED Transportation Allowence: 200

10950.00 AED

Your program should prompt the user to input the gross amount. The output should be like this:

Gross Amount: 10000.00

Retirement Plan: - 500.00 AED
Health Insurance: - 750.00 AED
Housing Allowence: + 2000.00 AED

Transportation Allowence: + 200.00 AED

Write a Java program to estimate the value of m in the following equation for a given value x and t.

$$m = \log_{10}\left(\frac{\sqrt{3}t^2}{\sqrt{t} + x}\right) + \left(\frac{\sqrt{t+3}}{t^2}\right)^t$$

SET B

Exercise #2: Design and Implement a program which calculates and prints the monthly paycheck for an employee. The net salary is calculated after taking the following deductions:

 Federal Income Tax:
 15%

 State Tax:
 3.5%

 Retirement Plan:
 5%

 Health Insurance:
 750

Your program should prompt the user to input the gross amount. The output should be like this:

 Gross Amount:
 10000.00 dirhams

 Federal Income Tax:
 1500.00 dirhams

 State Tax:
 350.00 dirhams

 Retirement Plan:
 500.00 dirhams

 Health Insurance:
 750.00 dirhams

 Net Salary:
 6900.00 dirhams

Write a Java program to estimate the value of m in the following equation for a given value x and t.

$$m = \log_{10} \left(\left(\frac{t^2}{\sqrt{\sqrt{t}}} \right)^t \right)$$