

**For GH¢600:**

The highest cumulative income less than GH¢600 is GH¢402, and the corresponding cumulative tax is GH¢0 (as per the original explanation).

Subtracting GH¢402 from GH¢600 gives GH¢198.

Tax on GH¢198 at 5% is GH¢9.90.

The total tax is  $\text{GH¢0} + \text{GH¢9.90} = \text{GH¢9.90}$ .

Net salary:  $\text{GH¢600} - \text{GH¢9.90} = \text{GH¢590.10}$ .

**For GH¢6,000:**

The highest cumulative income less than GH¢6,000 is GH¢3,642, and the corresponding cumulative tax is GH¢543.50.

Subtracting GH¢3,643 from GH¢6,000 gives GH¢2,357.

Tax on GH¢2,357 at 25% is GH¢589.25

The total tax is  $\text{GH¢543.50} + \text{GH¢589.25} = \text{GH¢1,132.75}$ .

Net salary:  $\text{GH¢6,000} - \text{GH¢1,132.75} = \text{GH¢4,867.25}$ .

**For GH¢60,000:**

The highest cumulative income less than GH¢60,000 is GH¢50,000, and the corresponding cumulative tax is GH¢13,631.15

Subtracting GH¢50,000 from GH¢60,000 gives GH¢10,000.

Tax on GH¢10,000 at 35% is GH¢3,500.

The total tax is  $\text{GH¢13,631.15} + \text{GH¢3,500} = \text{GH¢17,131.15}$

Net salary:  $\text{GH¢60,000} - \text{GH¢17,131.15} = \text{GH¢42,868.85}$ .

**Algorithm**

- Take gross salary from the user.
- Create a list containing the cumulative income ranges.
- Create a list of the cumulative taxes charged.
- Create another list for the rates charged per chargeable income range.
- Loop through the list of cumulative income and choose the highest income less than the gross salary the user entered.
- Find the tax on the cumulative income selected using its respective cumulative tax charged.
- Subtract the selected cumulative income from the gross salary.

- From the previous result, calculate the tax on it using the next rate charged.
- Sum the taxes charged and subtract them from the gross income to give the net salary

B.

Please enter your gross salary: 200

No tax was deducted hence your net salary is 200.0

200.0

Please enter your gross salary: 30000

The tax on your gross salary 30000.0 is 7631.15 .

Your net salary is 22368.85 .

22368.85

Please enter your gross salary: 2000

The tax on your gross salary 2000.0 is 256.15 .

Your net salary is 1743.85 .

1743.85

Please enter your gross salary: 402

The tax on your gross salary 402.0 is 0.0 .

Your net salary is 402.0 .

402.0

So with the above, I verified my program with the example in the question. Then I chose a number less than 402 to see if nothing would be deducted. I also used the figures the question asked to see if it correlated with the answers I got when I solved.