

1. Income Tax Calculator

Given a person's yearly salary (e.g., Rs. 950,000), calculate income tax based on these slabs:

- Up to Rs. 500,000 → 0%
 - Rs. 500,001 to 750,000 → 10%
 - Above Rs. 750,000 → 20%
- Calculate and print the total tax.
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2. Multi-Slab Electricity Bill Estimator

Given electricity usage in units (e.g., 370 units):

- First 100 units → Rs. 10/unit
 - Next 200 units → Rs. 15/unit
 - Remaining units → Rs. 20/unit
- Calculate the total bill.
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3. Loan Eligibility Decision

Inputs:

- Monthly income
 - Existing loan amount
 - Credit score
- Eligible if:
- $\text{Income} > \text{Rs. } 60,000$
 - $\text{Loan} < \text{Rs. } 200,000$
 - $\text{Credit score} \geq 700$
- Print if the person is eligible for a new loan.
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4. Mobile Data Usage Alert

Inputs:

- Data limit = 5 GB
 - Data used = (e.g.) 4.3 GB
If data used is 90% or more of the limit, display a warning.
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5. BMI & Health Risk Classifier

Inputs:

- Weight (kg)
 - Height (m)
Calculate BMI = $\text{weight} / \text{height}^2$
Classify:
 - $< 18.5 \rightarrow$ Underweight
 - $18.5\text{--}24.9 \rightarrow$ Normal
 - $25\text{--}29.9 \rightarrow$ Overweight
 - $\geq 30 \rightarrow$ Obese
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6. Train Ticket Pricing Based on Age

Base price = Rs. 1000

Discount rules:

- Age $< 5 \rightarrow$ Free
 - Age $5\text{--}18 \rightarrow$ 50% off
 - Age $\geq 60 \rightarrow$ 30% off
 - Others \rightarrow Full price
Calculate the final ticket cost.
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7. Currency Conversion (LKR to Multiple Currencies)

Convert a given amount in Sri Lankan Rupees to:

- USD (1 LKR = 0.0031 USD)
 - JPY (1 LKR = 0.48 JPY)
 - EUR (1 LKR = 0.0028 EUR)
- Show all three converted values.
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8. 3-Subject Grade Evaluator

Inputs: Marks for 3 subjects

Find average and classify:

- Avg < 50 → Fail
 - 50–64 → Pass
 - 65–79 → Merit
 - 80–100 → Distinction
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9. Find Min, Max, Median of 3 Numbers

Given 3 different numbers, find:

- Minimum
 - Maximum
 - Middle value (median)
- Only use `if-else` conditions and local variables.
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10. Mobile Recharge Bonus Calculator

Given a recharge amount, calculate bonus:

- < Rs. 100 → No bonus

- Rs. 100–199 → 5% bonus
- Rs. 200–499 → 10% bonus
- \geq Rs. 500 → 20% bonus
Display total value (recharge + bonus).

11 Internet Bill Tier Calculator

An internet provider charges based on data usage:

- Up to 50 GB → Rs. 1000
- 51–100 GB → Rs. 1500
- Above 100 GB → Rs. 2000
Input the total GB used and output the correct bill.

12. Mobile Number Validity Checker

Given a mobile number (as a 10-digit string), check if it's:

- 10 digits
- Starts with 07, 08, or 09
Print if it's a valid Sri Lankan mobile number.

13. GPA Calculator for 4 Subjects

Each subject has a grade point (0.0 to 4.0).

Calculate $GPA = (\text{Sum of all grade points}) / 4$

Then classify:

- $GPA \geq 3.7$ → First Class
- 3.0–3.69 → Second Upper
- 2.0–2.99 → Second Lower
- < 2.0 → Fail

14. Speeding Fine Calculator

Given a speed limit (e.g., 60 km/h) and your speed (e.g., 85 km/h):

- If speed is within limit → No fine
- If exceeded by ≤ 10 → Rs. 1000
- Exceeded by 11–20 → Rs. 2500
- Exceeded by > 20 → Rs. 5000
Print the applicable fine.

15. Hotel Room Booking Price

Base room rate = Rs. 5000

Discount:

- If booking for 2 nights → 10%
- 3 to 5 nights → 15%
- More than 5 nights → 25%
Calculate total price after discount.

16. Triangle Validity Checker

Given 3 side lengths, determine if they can form a valid triangle using the rule:

Sum of any two sides must be greater than the third side.

If valid, also print if it's:

- Equilateral
 - Isosceles
 - Scalene
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17. Sales Commission Calculator

Given a sales amount:

- Up to Rs. 50,000 → 2% commission
 - Rs. 50,001–100,000 → 5%
 - Over Rs. 100,000 → 10%
Calculate and print the commission.
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18. Car Rental Price Calculator

Base rate = Rs. 3000/day

Add:

- Rs. 1000 if driver is included
 - Rs. 1500 if GPS is included
Input number of days, driver option, GPS option
Calculate total rental cost.
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19. Exam Pass/Fail Checker (with Absences)

Given:

- Marks out of 100
 - Number of absences
Rules:
 - Pass if marks ≥ 50
 - But fail if absences > 10
Check and print result: Pass or Fail
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20. Salary Bonus Calculator Based on Experience

Given:

- Base salary
 - Years of experience
Bonus:
 - < 2 years → 5%
 - 2–5 years → 10%
 - 5 years → 15%
- Calculate and print total salary including bonus.