

Draw flowchart & write python program from following programs,

1. Write a Program to read one integer number and print the value of entered number.
2. Write a Program to read two integer numbers and print the values of the entered numbers.
3. Write a Program to read two integer numbers and find the sum of the numbers.
4. Write a Program to read two integer numbers and find the difference between first and second number.
5. Write a Program to read two integer numbers and find the product of the numbers.
6. Write a Program to find the average of given four numbers.
7. Write a Program to print the negative of the entered number.
8. Write a Program to calculate $a/b + c/d$
9. Write a Program to find simple interest from given principal, rate of interest and number of years.
10. Write a Program to find compound interest for three years given with principal and rate of interest.
11. Write a Program to find area and circumference of the circle by taking radius from the user.
12. Write a Program to find volume and surface area the cuboids by taking the length of all the three sides from the user.
13. Write a Program to input total number of pens and price per pen from the user and print the total bill in proper format.
14. Find out the total and percentage for the student appearing in three subjects in the examination
15. Find the net salary of an employee.
 Net Salary = Basic Salary + DA + HRA+MA-PF-IT
 Where DA = 70% of basic salary,
 HRA = 15% of basic salary
 PF = 8% of basic salary
 IT = 12% of basic salary
 MA = Rs. 1000 fixed.
16. Write a S program to calculate the amount to be paid by customer for electric bill, where unit consumed = current meter reading – Past meter reading &
 Total bill = Unit Consumed * Charges per unit
 Output should be,

Electricity Bill

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Customer No.      : ****
Customer Name     : *****
Past Reading      : *****
Current Reading   : *****
Units Consumed    : *****
Charge per Unit   : *****
Past Reading      : *****
Billed Amount     : *****.**
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17. Write a program to calculate bill amount for lorry driver. Input lorry number, distance travelled in kms, rate per kms and number of days of journey. For each day driver will be given Rs. 750 for his own expense. Print lorry number, distance in kms, rate per kms. Number of days of journey and bill amount.
18. Find remainder of given two numbers.
19. Write a program to find year, month and days from given number of days. Consider a month of 30 days and year of 365 days.

Decision statements

20. Write a Program to check whether the number is positive or not.
21. Write a Program to check whether the number is zero or not.
22. Write a Program to check whether the number is odd or even.
23. Write a Program to check whether the given year is leap year or not.
24. Write a Program to check whether the number is perfect square or not.
25. Write a Program to print largest of the two numbers.
26. Write a Program to read two integers, if both the integers are positive then print addition of the integers else print subtraction of second number from first number.
27. Write a Program to check whether the number is in the given range or not.
28. Write a Program to find the smallest of the three integers.
29. Write a Program to enter the marks of 6 subjects and print the result as First class if percentage is ≥ 60 , Second Class if percentage is ≥ 48 , Pass class if percentage is ≥ 40 . Print ReExam required if student is failing in maximum of 3 subjects. Passing criteria is 40 marks in each subject.
30. An electronic component vendor supplies three products: transistors, resistors and capacitors. The vendor gives discount of 10% on orders for transistors if order is for more than Rs. 1000. On order of more than Rs. 500 for resistors, a discount of 5% is given, and a discount of 10% is given on order for capacitors of value more than Rs. 2000. Write a Program that reads the product and the order amount and prints the net amount the customer is required to pay after discount.
31. Write a program to calculate electricity bill. Input customer number, past reading, present reading, and customer type. Customers are of two types: I(Industrial) and R(Regular). For industrial customers, rate per unit is Rs. 10 while for regular customers; rate per unit is Rs. 6.5. Print the bill amount in appropriate format.
32. Write a program to find the medicine bill. Input drug no, drug name, units purchased, rate per unit, packing unit(I=Injection, B=Bottle,T=Tablet) and sales tax in %age. Discount given on tablet is 2.5%, for injection is 7.5% and for bottle is 5%. Print the bill in attractive format.
33. Write a program to calculate bonus for an employee. Bonus is given on the basic salary. Rules for calculating bonus is,

Basic salary	Bonus(in %age)
Less than 2000	5
Between 2000 and 5000	7
Between 5000 and 7000	9
More than 7000	12

34. Write a program to calculate total salary of an employee based on following criteria:

Basic	DA	MA
More than 10000	10% of basic salary	Rs. 500
Between 10000 and 15000	8% of basic salary	Rs. 300
Between 15000 and 25000	6% of basic salary	Rs 250
More than 25000	4% of basic salary	-

Salary = basic salary + DA+MA

35. Write a program to accept customer number, preset reading and past reading to calculate electricity bill. Charges are as follows,

Consumption (in units)	Rate
0-200	Rs. 2.5 per unit
201-400	Rs. 500 + Rs. 3.0 per unit
401-600	Rs. 1100 + Rs. 5.0 per unit
>600	Rs. 2100 + Rs. 8.5 per unit

36. A cloth showroom has announced the following seasonal discounts on purchase of items,

Purchase Amount	Discount	
	Mill Cloth	Handloom cloth
0 – 1000	-	5%
1001-2000	5%	7.5%
2001-3000	7.5%	10%
Above 3000	10%	15%

Write a program to compute the net amount to be paid by a customer.

37. A library pays overtime to its staff as per the following schedule:

If the basic salary is less than Rs. 5000, overtime allowance is Rs. 50 per hour for first 10 hours and then Rs. 75 per hour for hours in excess of 10 hours upto maximum of Rs. 7500 per month. If the basic salary is more than Rs. 5000 but less than Rs. 10000, overtime allowance is Rs. 75 per hour for first 10 hours and then Rs. 100 per hour for hours in excess of 10 hours upto maximum of Rs. 10000 per month. If the basic salary is more than Rs. 10000, overtime allowance is Rs. 100 per hour for first 10 hours and then Rs. 150 per hour for hours in excess of 10 hours upto maximum of Rs. 15000 per month.

Write a program to read an employee's basic salary and overtime hours and to compute and print the gross salary.

38. A pharmaceutical company classified its executives into four levels for the benefit of certain perks. The level and corresponding perks are as shown below,

Levels	Perks	
	Conveyance Allowance	Entertainment Allowance
1	20000	600
2	7000	400
3	4000	200
4	1500	-

An executive's gross salary includes basic pay, HRA at 25% of basic and other perks. Income tax is to be calculated on gross salary as follows,

Gross Salary	Tax Rate
Less than 20000	No tax
Between 20001 and 40000	3%
Between 40001 and 50000	5%
More than 50000	8%

Write a program that will read an executive's job level, basic salary and other information and then compute the net salary.

39. Write a program to accept marks of a quiz obtained by one student. Quiz is of 10 marks. If student scores 10/9 marks then print the result as excellent. For 8/7 marks then print "very good". For 6/5 marks print result as "good". For 4 marks result is "average". For marks less than 4 results is "poor".