1. Write a program to compute the area of a square or area of a circle after prompting the user to type the first character of the name ('S' for square or 'C' for circle).

2. Write a program to implement the flowchart.
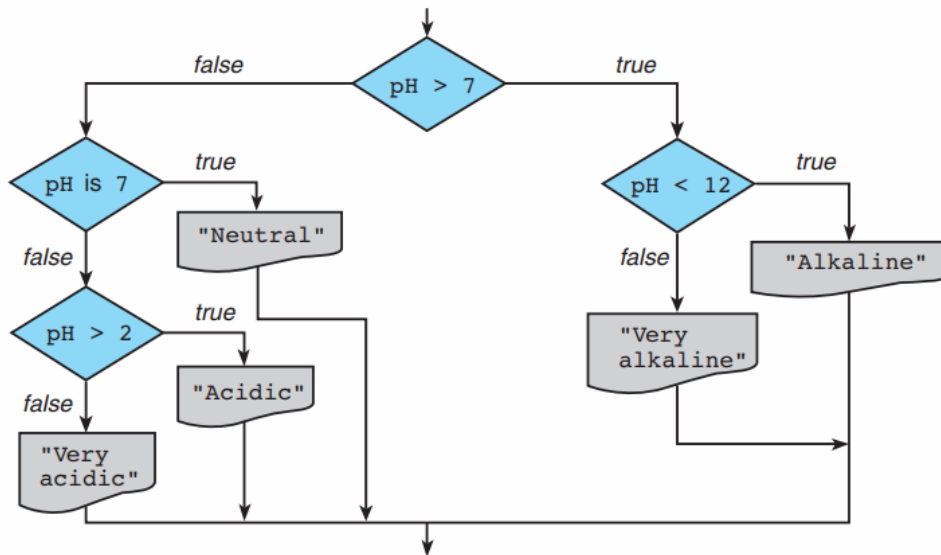
3. Write a program that reads a ship's serial code and displays the class of the ship. Each ship serial code begins with a letter indicating the class of the ship.

B or b	Battleship
C or c	Cruiser
D or d	Destroyer
F or f	Frigate

4. Write a program to calculate the square of those numbers only whose least significant digit is 5.
5. Write a program that calculates the body mass index (BMI) and categorizes it as underweight, normal, overweight, or obese, based on the following table

BMI	Weight status
Below 18.5	Underweight
18.5–24.9	Healthy
25.0–29.9	Overweight
30.0 and above	Obese

To calculate BMI = weight in Kg / (height in meters)^2

6. A company has the following discount policy. If the purchase is for under Rs.2000, no discount is given. On purchases for Rs. 2000 and above but less than Rs.5000 a discount of 5% is given. On purchase of goods for Rs. 5000 and above a discount of 8% is given. Write a program to accept the purchase amount and print the final bill amount.

7. Write a program to calculate the Electricity bill. Read the previous and current meter reading. The charges are as follows.

No of units	Fixed Charge	From	To	Cost per unit
<=100	Rs.0	1	100	Nil
<=200	Rs.20	101	200	Rs.2
<=500	Rs.30	101	200	Rs.2
		201	500	Rs.3
>500	Rs.50	101	200	Rs.3.50
		201	500	Rs.4.60
		>500		Rs 6.60

8. Admission to a professional courses is subject to the following conditions:
   a. Marks in Mathematics >=60
   b. Marks in Physics >=50
   c. Marks in Chemistry >=40
   d. Total in all three subjects >=200 (or) Total in Mathematics and Physics >=150

   Write a program to check whether a particular student's mark is eligible for admission or not.

9. The basic eligibility criteria required to apply for any SBI Credit Cards are as follows,

   - Age of the primary applicant must be between 21 years to 60 years.

   - Age of the add-on card applicant must be above 18 years.

   - Must be either salaried, self-employed, student, or retired pensioner.

   - Primary applicant should have a stable income (gross) of upto Rs.3 lakh per year.

   Accept required inputs from the user, Write a program to check if the person meets the bank's eligibility criteria.

10. Write a python program to print all numbers in a range 700 to 900 (inclusive) divisible by a given number from user.

11. Write a Python program to check whether a specified value is contained in a group of values.

12. Write a python program to read three numbers (a,b,c) and check how many numbers between 'a' and 'b' are divisible by 'c'.

13. Write a program to get 4 digit pin number from the user. If the user enters 7878, display a message "Welcome to SBI Banking" else if the user enters any other number display a message "Enter a valid pin number".
    Expected Output:
    Enter the PIN: 7878
    Welcome to SBI Banking
    Enter number2: 1024
    Please enter a valid pin number

14. Write a Python program to create a histogram from a given list of integers.
    Input: Character to pint: $
    Format to print: 4162

Output:

$$$$

$

$$$$$$

$$

15. A hotel has a pricing policy as follows:

   a. 2 people: Rs.5000

   b. 3 people: Rs.6000

   c. 4 people: Rs.7000

   Additional people (max 2 are allowed): Rs.500 per person

   If the customer is staying on company business, there is a 20% discount. If the customer

   is over 60 years of age, there is a 15% discount. A customer does not receive both

   discounts. Write a program to print the cost of the room for the given input.

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