

Here are 20 Python questions that only use `if`, `elif`, `else`, and nested conditionals. Each question has a different scenario to practice and understand conditional statements.

Simple Conditional Questions

- 1. Check a number**
Write a program to check if a number is positive, negative, or zero.
 - 2. Check even or odd**
Write a program to check if a given number is even or odd.
 - 3. Grade Checker**
Write a program to display grades based on a percentage:
 - A: 90-100
 - B: 70-89
 - C: 50-69
 - F: Below 50
 - 4. Check divisibility**
Check if a given number is divisible by 3, 5, or both.
 - 5. Minimum of two numbers**
Find the smaller number between two given numbers.
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Nested Conditional Questions

- 6. Find the largest of three numbers**
Given three numbers, find the largest using nested `if` statements.
 - 7. Check leap year**
Write a program to check if a given year is a leap year or not:
 - Divisible by 4 and not 100, or divisible by 400.
 - 8. Nested temperature check**
Categorize temperature into:
 - Cold: Below 15°C
 - Warm: 15°C to 30°C
 - Hot: Above 30°C
 - 9. Vowel or consonant**
Check if a given character is a vowel or consonant.
 - 10. Driving eligibility**
Check if a person is eligible to drive:
 - Must be 18 or older.
 - Nested check for possessing a valid license.
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Advanced Logical Questions

11. Triangle validation

Check if three sides can form a triangle:

- The sum of any two sides must be greater than the third side.

12. Calculate tax based on salary

Determine the tax rate:

- Salary \leq 5,00,000: 5%
- 5,00,001 - 10,00,000: 10%
- Above 10,00,000: 20%

13. Categorize age

Categorize a person's age:

- 0-12: Child
- 13-19: Teen
- 20-59: Adult
- 60+: Senior

14. Logical AND check

Check if a number is greater than 10 and divisible by 2.

15. Logical OR check

Check if a number is less than 5 or greater than 20.

Application-Based Scenarios

16. Electricity bill

Calculate an electricity bill:

- Usage \leq 100 units: ₹5/unit
- 101-200 units: ₹10/unit
- Above 200 units: ₹15/unit

17. Season finder

Find the season based on the month:

- December-February: Winter
- March-May: Spring
- June-August: Summer
- September-November: Autumn

18. Password validation

Check if a password meets these conditions:

- At least 8 characters.
- Contains the character '@'.

19. Categorize BMI

Categorize Body Mass Index (BMI):

- Below 18.5: Underweight
- 18.5 - 24.9: Normal
- 25 - 29.9: Overweight
- 30 or higher: Obese

20. Character type checker

Check if a given character is:

- Alphabet
- Digit

- Special character

These questions cover a variety of scenarios using `if`, `elif`, `else`, and nested conditionals,