

16. Print numbers 1-10, classify as small or large (for loop with if/else)

Use a `for` loop from 1 to 10. For each number, print it followed by "small" if <6 , else "large" using `if/else`.

17. Sum multiples of 4 up to 20, ignore others (for loop with if)

Use a `for` loop from 1 to 20. Add to a sum only if the number is a multiple of 4 using `if`. Print the final sum.

18. Countdown from 10, alert for even numbers (while loop with if)

Use a `while` loop to count down from 10 to 1. Print each number, and if even, print "Even alert!" after it using `if`. End with "Liftoff!".

19. Grade letters for scores (for loop with if/elif/else)

Use a `for` loop over scores [85, 92, 67, 78]. For each, print the score and grade: "A" if ≥ 90 , "B" if ≥ 80 , "C" if ≥ 70 , else "D" using `if/elif/else`.

20. Count letters in "world" (for loop with if/elif/else)

Use a `for` loop over "world". Count vowels (a/e/i/o/u) with `if`, consonants with `elif`, and skip others with `else`. Print both counts.

21. Quiz score checker (while loop with input and if/elif/else)

Use a `while` loop to ask for 3 quiz scores (0-100) until done. For each, print "Excellent" if >90 , "Good" if >70 , else "Needs work" using `if/elif/else`. Then print average.

22. Categorize fruits (for loop with if/elif/else)

Use a `for` loop over ["banana", "apple", "carrot", "orange"]. Print "Fruit" if "apple" or "orange", "Veggie" if "carrot", else "Other" using `if/elif/else`.

23. Rock-paper-scissors simulator (while loop with input and if/elif/else)

Use a `while` loop: User inputs choice (r/p/s), computer random (import random). Determine winner: tie if same, rock>scissors etc. Print result using `if/elif/else`. Play 3 rounds.

24. Triangle type checker (for loop with input and if/elif/else)

Use a `for` loop for 3 sets of sides (user input). For each, classify triangle: equilateral if all equal, isosceles if two equal, scalene else using `if/elif/else`. Print type.

25. Password validator loop (while loop with input and if/elif/else)

Use a `while` loop: Prompt for password until valid. Check length ≥ 8 (`if`), has uppercase (`elif`), has number (`elif`), else invalid. Print "Access granted!" on success.