

1. Input & Output

1. Take user input of their name and age and print:
"Hello <name>, you are <age> years old."
 2. Take 3 numbers from the user and print their sum, product, and average.
 3. Ask the user for a number and print whether it's even or odd.
 4. Take a number and print its table from 1 to 10.
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2. If-Else Conditions

5. Take marks as input and print the grade according to:
 - 90-100 → A
 - 80-89 → B
 - 70-79 → C
 - 60-69 → D
 - <60 → F
 6. Check whether a year entered by the user is a **leap year**.
 7. Take 3 numbers and print the **largest** one.
 8. Check if a character entered by the user is a **vowel or consonant**.
 9. Check if a number is **positive, negative, or zero**.
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3. Switch/Match Case

(Python 3.10+)

10. Take a number 1-7 and print the corresponding day of the week. (Your current code)
 11. Take a month number 1-12 and print the number of days in that month.
 12. Take an operator (+, -, *, /) and two numbers and perform the operation.
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4. Loops

For Loop

13. Print numbers from 1 to 50.
14. Print **all even numbers** from 1 to 100.
15. Print the **factorial** of a number.
16. Print the **Fibonacci sequence** up to n terms.
17. Print a **multiplication table** of a number using a loop.

While Loop

18. Take numbers from user until they enter 0 and print the sum.
 19. Reverse a number using a while loop.
 20. Guessing game: generate a random number and let the user guess until correct.
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5. Functions

21. Write a function to check if a number is **prime**.
 22. Write a function to **swap two numbers**.
 23. Write a function to **count vowels** in a string.
 24. Write a function to return the **factorial** of a number.
 25. Write a function to **check palindrome** (string and number).
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6. Arrays / Lists

26. Take n numbers as input and store them in a list; print the **sum** and **average**.
27. Find the **largest** and **smallest** number in a list.
28. Reverse a list.

29. Sort a list in ascending and descending order.
 30. Remove duplicates from a list.
 31. Count the occurrence of an element in a list.
 32. Merge two lists and print unique elements.
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7. String Operations

33. Take a string input and **print each character on a new line**.
 34. Count **vowels, consonants, digits, and special characters** in a string.
 35. Reverse a string without using built-in functions.
 36. Check if a string is a **palindrome**.
 37. Replace all vowels in a string with *.
 38. Convert a string to **uppercase, lowercase, title case**.
 39. Check if a word exists in a sentence.
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8. Combined / Advanced Practice

40. Create a **simple calculator** with functions and match-case.
41. Take a sentence and **count the frequency of each word**.
42. Find all **prime numbers in a list**.
43. Generate a **pattern** using loops, e.g., triangle of stars.
44. Create a **menu-driven program**:
 - 1 → Add number
 - 2 → Remove number
 - 3 → Show numbers
 - 4 → Exit
45. Take a list of strings and **sort them by length**.
46. Merge two lists, remove duplicates, and **sort the final list**.
47. Create a **number guessing game** with limited attempts.
48. Take a list of numbers and print **sum of even numbers** and **product of odd numbers**.
49. Read a string and **print all substrings**.
50. Create a **function that takes variable number of arguments** and returns the sum.