

✅ Variables & Data Types

1. Declare variables of int, float, string, and bool types.
 2. Use type() to print the data type of each variable.
 3. Take user input for name and age, and print them.
 4. Swap two variables without using a third variable.
 5. Convert string to int and perform addition.
 6. Check type conversion from int to string.
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✅ List

7. Create a list of 5 numbers and print them.
 8. Add an item to the list using append().
 9. Insert an item at the beginning using insert().
 10. Remove the last item using pop().
 11. Sort the list in ascending order.
 12. Reverse the list and print it.
 13. Print the first 3 elements using slicing.
 14. Count occurrences of an element in a list.
 15. Find the max and min element in a list.
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✅ Tuple

16. Create a tuple of 4 colors.
 17. Try to change a value in the tuple (observe error).
 18. Check if an item exists in the tuple.
 19. Convert a tuple into a list and add an element.
 20. Loop through a tuple and print all values.
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✅ Set

21. Create a set with some duplicate values.

- 22. Add an element to the set.
 - 23. Remove an element from the set.
 - 24. Find the union of two sets.
 - 25. Find the intersection of two sets.
 - 26. Check if one set is a subset of another.
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✓ **Loops**

- 27. Print numbers from 1 to 10 using a for loop.
 - 28. Print even numbers from 1 to 20 using while loop.
 - 29. Loop through a list and print only strings.
 - 30. Print the factorial of a number using loop.
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✓ **Conditional Statements**

- 31. Take a number input and check if it's positive, negative, or zero.
 - 32. Check if a number is even or odd.
 - 33. Take age input and check if eligible to vote.
 - 34. Take a character and check if it's a vowel or consonant.
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✓ **Match-case (Python 3.10+)**

- 35. Take input of a day number (1–7) and print the weekday using match-case.