**For loop**

1. Write a program to print numbers from 1 to 10 using a for loop.
2. Print the even numbers between 1 and 20 using a for loop.
3. Print the multiplication table of 5 using a for loop.
4. Find the sum of the first 10 natural numbers using a for loop.
5. Print the square of numbers from 1 to 10 using a for loop.
6. Write a program to reverse a given string using a for loop.
7. Count the number of vowels in a given string using a for loop.
8. Print the factorial of a given number using a for loop.
9. Print Fibonacci series up to **n** terms using a for loop.
10. Find the largest number in an array using a for loop.
11. Write a program to check if a given number is a prime number using a for loop.
12. Print all prime numbers between 1 and 50 using a for loop.
13. Write a program to count occurrences of a specific character in a string using a for loop.
14. Write a program to print a right-angled triangle pattern using a for loop:

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1. Create a number pyramid using a for loop:

1

121

12321

1234321

1. Print all odd numbers between 1 and 50 using a for loop.
2. Write a program to print numbers from **n** to 1 using a for loop.
3. Print the first **n** multiples of a given number.
4. Calculate the sum of all even numbers between 1 and 100.
5. Find the product of all numbers from 1 to **n** using a for loop.
6. Reverse a number using a for loop (e.g., input: 1234, output: 4321).
7. Count the number of digits in a given number using a for loop.
8. Print the sum of digits of a number using a for loop.
9. Check if a number is an Armstrong number using a for loop (e.g., 153 = 1³ + 5³ + 3³).
10. Write a program to print the **GCD (Greatest Common Divisor)** of two numbers using a for loop.
11. Print all perfect numbers between 1 and 1000 using a for loop (A number is perfect if the sum of its factors, excluding itself, is equal to the number).
12. Write a program to check if a number is palindrome using a for loop (e.g., 121 is a palindrome).
13. Write a program to generate a **Floyd’s Triangle** using a for loop:

1

2 3

4 5 6

7 8 9 10

1. Generate the following pattern using a for loop:

1

2 3

4 5 6

7 8 9 10

1. Print all multiples of 3 from 1 to 100 using a for loop.
2. Write a program to print numbers in descending order from **n** to 1.
3. Print the ASCII values of characters from ‘A’ to ‘Z’ using a for loop.
4. Print the sum of the first **n** odd numbers.
5. Find the sum of all numbers divisible by 5 between 1 and 100.
6. Print all prime factors of a given number using a for loop.
7. Write a program to count the number of words in a string using a for loop.
8. Find the **LCM (Least Common Multiple)** of two numbers using a for loop.
9. Print the reverse of an array using a for loop.
10. Find the sum of digits of all numbers from 1 to **n** using a for loop.
11. Convert a binary number to decimal using a for loop.
12. Generate the Fibonacci sequence up to **n** terms using a for loop.
13. Print all Armstrong numbers between 1 and 1000 using a for loop.
14. Find the smallest and largest number in a given list using a for loop.
15. Write a program to print a **Hollow Square Pattern** using a for loop:

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1. Generate a **Diamond Pattern** using a for loop:

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1. Print the following pattern using nested for loops:

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1. Print a right-angled triangle pattern:

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1. Print a square pattern with numbers:

1111

2222

3333

4444

1. Print a decreasing number triangle:

55555

4444

333

22

1

1. Print a multiplication table for numbers 1 to 5 using nested for loops.
2. Print a pyramid pattern:

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1. Print an inverted pyramid pattern:

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1. Print a Floyd’s triangle:

1

2 3

4 5 6

7 8 9 10

1. Print a hollow square pattern:

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1. Print a number pyramid:

1

121

12321

1234321

1. Print a diamond pattern using nested for loops:

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1. Print a checkerboard pattern using \* and spaces:

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1. Print an **hourglass pattern** using nested for loops:

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1. Print an **X-pattern** using nested for loops:

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1. Print a **hollow diamond pattern** using nested loops:

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1. Print the **chessboard pattern** using # and spaces:

# # # #

# # # #

# # # #

# # # #

1. Print the following square pattern:

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1. Print a **right-angled triangle pattern**:

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1. Print a **reverse right-angled triangle pattern**:

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1. Print a **hollow square pattern**:

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1. Print a **number pattern**:

1

12

123

1234

1. Print a **pyramid pattern**:

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1. Print a **hollow pyramid pattern**:

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1. Print a **diamond pattern**:

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1. Print a **number pyramid**:

1

121

12321

1234321

1. Print **Floyd’s triangle**:

1

2 3

4 5 6

7 8 9 10

1. Print **Pascal’s Triangle** up to **n** rows.
2. Print an **hourglass pattern**:

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1. Print an **X-pattern**:

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1. Print a **hollow diamond pattern**:

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1. Generate a **checkerboard pattern** using \* and spaces:

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1. Print **Zig-Zag Pattern**:

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1. Find and print all **prime numbers between 1 and 100** using nested loops.
2. Print a **Chessboard Pattern** using # and spaces:

# # # #

# # # #

# # # #

# # # #

1. Print the **Hollow Butterfly Pattern**:

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1. Print an **inverted hourglass pattern**:

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