



1. Conditional Statements Practice Questions

Basic Level

- 1. Check Eligibility to Vote:**
Write a program to check if a person is eligible to vote (age ≥ 18).
- 2. Number Classification:**
Take an integer input and determine if it is positive, negative, or zero.
- 3. Grade Calculator:**
Write a program to input marks and assign grades as:
 - 90 and above: "A"
 - 80-89: "B"
 - 70-79: "C"
 - Below 70: "Fail".
- 4. Odd or Even:**
Check whether a given number is even or odd.

Intermediate Level

- 5. Leap Year Checker:**
Write a program to check whether a year is a leap year or not. (Hint: Divisible by 4 and not 100 unless divisible by 400).
- 6. Compare Three Numbers:**
Take three numbers as input and print the largest.
- 7. Discount Calculator:**
Input the price of an item and apply discounts:
 - Above \$100: 20% discount.
 - \$50-\$100: 10% discount.
 - Below \$50: No discount.

2. For Loop Practice Questions

Basic Level

- 1. Sum of N Natural Numbers:**
Write a program to calculate the sum of the first N natural numbers.
- 2. Multiplication Table:**
Print the multiplication table of a given number (e.g., for 5).
- 3. List Traversal:**
Given a list [1, 2, 3, 4, 5], print each element using a for loop.



Intermediate Level

4. **Factorial Calculator:**

Write a program to calculate the factorial of a number.

5. **Reverse a String:**

Input a string and print it in reverse using a for loop.

6. **Find Prime Numbers:**

Print all prime numbers between 1 and a given number N.

Advanced Level

7. **Pattern Printing:**

Print the following pattern for a given value of N:

```
*  
* *  
* * *  
* * * *
```

8. **Sum of Odd and Even Numbers:**

Take a list of numbers and find the sum of odd and even numbers separately.

3. While Loop Practice Questions

Basic Level

1. **Countdown Timer:**

Write a program to count down from a given number to 0 using a while loop.

2. **Guess the Number:**

Write a guessing game where the user keeps guessing a predefined number until they get it right.

3. **Simple Sum Calculator:**

Keep asking the user for numbers and calculate the sum until they enter 0.

Intermediate Level

4. **Reverse Digits:**

Input a number and reverse its digits using a while loop.

Example: 12345 → 54321.

5. **Find the Smallest Divisor:**

Write a program to find the smallest divisor of a given number other than 1.



Code Gemini

+91 9373610956

www.codegemini.in

codegeminiedtech@gmail.com

Advanced Level

6. **Fibonacci Sequence:**

Generate the first N terms of the Fibonacci sequence using a while loop.

7. **Check Palindrome Number:**

Write a program to check whether a number is a palindrome (e.g., 121 is a palindrome).

Challenge Questions (Mix of Conditional Statements and Loops)

1. **FizzBuzz Program:**

Print numbers from 1 to 50. For multiples of 3, print "Fizz", for multiples of 5 print "Buzz", and for multiples of both, print "FizzBuzz".

2. **Number Pyramid:**

For a given N, print the following pattern:

```
1
22
333
4444
```