**Interview Questions – Logic-Based Programs**

### 🔢 Prime and Armstrong Logic Questions

**1. Print All Prime Numbers from m to n**  
**Problem:** Given a range from m to n, print all prime numbers in that range.  
**Input:** m = 10, n = 30  
**Output:** 11 13 17 19 23 29  
**Explanation:** A prime number has only two factors: 1 and itself.

**2. Count of All Prime Numbers from m to n**  
**Problem:** Count how many prime numbers are there between m and n.  
**Input:** m = 1, n = 10  
**Output:** 4  
**Explanation:** Prime numbers are: 2, 3, 5, 7

**3. Print All Armstrong Numbers in a Range**  
**Problem:** Print all Armstrong numbers between m and n.  
**Input:** m = 1, n = 500  
**Output:** 1 153 370 371 407  
**Explanation:** Armstrong number = sum of each digit raised to the power of number of digits.

**4. First Prime Number from m to n**  
**Problem:** Find the first prime number in the given range.  
**Input:** m = 10, n = 25  
**Output:** 11

**5. Last Prime Number from m to n**  
**Problem:** Find the last prime number in the given range.  
**Input:** m = 10, n = 25  
**Output:** 23

**6. First Vowel in a Name**  
**Problem:** Given a string, find the first vowel in the string.  
**Input:** name = "Krishna"  
**Output:** i  
**Explanation:** First vowel from left is ‘i’

**7. Last Vowel in a Name**  
**Problem:** Given a string, find the last vowel in the string.  
**Input:** name = "Ramakrishna"  
**Output:** a  
**Explanation:** Last vowel is ‘a’

**8. Print All Even Numbers Using Continue**  
**Problem:** Use continue statement to skip odd numbers and print only even numbers between 1 and n.  
**Input:** n = 10  
**Output:** 2 4 6 8 10

**9. Print All Odd Numbers Using Continue**  
**Problem:** Use continue statement to skip even numbers and print only odd numbers.  
**Input:** n = 10  
**Output:** 1 3 5 7 9

**10. Count of Prime and Composite Numbers from m to n**  
**Problem:** Count how many are prime and how many are composite numbers in range m to n.  
**Input:** m = 1, n = 10  
**Output:** Prime: 4, Composite: 4  
**Explanation:** Prime: 2,3,5,7 | Composite: 4,6,8,9

Would you like to: - 🐍 Add code for these too? - 📥 Merge this into your main pattern document? - ➕ Add more logic/interview questions?