

Intermediate Java Questions (Loops, Functions, If-Else)

1. Sum of Even Numbers

Write a Java program to calculate the sum of all even numbers from 1 to 100 using a for loop.

2. Factorial Using Function

Write a function `int factorial(int n)` that returns the factorial of a given number `n`. Then call it from `main()`.

3. Number Guessing Game

Write a program that asks the user to guess a number between 1 and 10. If the guess is correct, print "Correct!", else print "Wrong, try again!" Repeat until correct using a while loop.

4. Check Prime Number

Write a function `boolean isPrime(int n)` that returns true if `n` is a prime number, false otherwise. Call it for a number input by the user.

5. Pattern Printing

Write a program to print the following pattern using nested loops:

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

6. Find Maximum of Three Numbers

Write a Java function that takes three integers as arguments and returns the largest using if-else.

7. Count Digits in a Number

Write a Java program using a while loop to count how many digits are in a number entered by the user.

8. Multiplication Table

Write a function `void printTable(int n)` that prints the multiplication table of `n` up to 10.

9. Reverse a Number

Write a program to reverse the digits of a number using a while loop.

Example: Input: 1234 -> Output: 4321

10. Check Palindrome Number

Write a function that checks if a number is a palindrome (same forwards and backwards), using loops and if-else.