Even Odd Numbers:

For this, we use if...else statement in Java. If num is divisible by 2, we print num is even. Else, we print num is odd. We can also check if num is even or odd by using ternary operator in Java.

Addition Of Two Numbers:

In this program, two integers 10 and 20 are stored in integer variables first and second respectively.

Then, first and second are added using the + operator, and its result is stored in another variable sum.

Finally, sum is printed on the screen using println() function.

Sum of Natural Numbers:

Sum of natural numbers: The following program finds the sum of n natural numbers. In this program, we have used the same while loop, as we have used in the above program. We have also taken two inputs from the user i.e. i and num. The variable i is the starting number and the variable num is the end number. For example, if we want to find the sum of natural numbers from 20 (i) to 100 (num).

Prime Numbers:

Prime Number: Inside the for loop, we check if the number is divisible by any number in the given range (2...num/2).

If num is divisible, flag is set to true and we break out of the loop. This determines num is not a prime number.

If num isn't divisible by any number, flag is false and num is a prime number.

Palindrome Number:

Palindrome number algorithm
Get the number to check for palindrome
Hold the number in temporary variable
Reverse the number
Compare the temporary number with reversed number
If both numbers are same, print "palindrome number"
Else print "not palindrome number"