

1. logicalOps()
   * In *main*(), take in two int values from the user; store in variables *x* and *y*
   * Call the method *logicalOps*() passing down the int arguments *x* and *y*
   * In *logicalOps*() do the following:
     + Using an *if* statement and the logical operator && (logical AND) determine if both numbers are positive
     + Extend the *if* statement to cater for the possibility that both numbers are negative
     + Extend the *if* statement and the logical operator || (logical OR) to cater for the possibility that one of the numbers is 0
     + Extend the *if* statement to cater for the possibility that one of the numbers is negative
2. simpleMaths()
   * In *main*(), take in two int values from the user; store in variables *x* and *y*
   * Call the method *simpleMaths*() passing down the int arguments
   * In *simpleMaths*() do the following:
     + Calculate the sum, product, difference and quotient (division) of the two numbers
     + In each case output the results in the format “The sum of 3 and 5 is 8” (assuming 3 and 5 were passed in)
3. modulus()
   * In *main*(), take in two int values from the user; store in variables *x* and *y*
   * Call the method *modulus*() passing down the int arguments
   * In *modulus*() do the following:
     + Determine if *x* is a multiple of *y* and return true of false depending on that result i.e. if you pass in 8 for *x* and 2 for *y*, you should be returning true back to main
     + Output the boolean returned in main()
4. incrDecr()
   * in the method incrDecr(), type in the following and understand the output:  
       
     int x=0, w=0, y=0, z=0;  
     x=4;  
     System.out.println(++x);  
     System.out.println(x++);  
     System.out.println(x);  
     System.out.println(--x);  
     System.out.println(x--);  
     System.out.println(x);  
       
     w=20;  
     x=10;  
     y=-5;  
     z=0;  
     System.out.println( w == x && y != z );  
     System.out.println( w == x || y != z );  
     System.out.println( ! ( w == (x + z) ) );