

① WAP -

Compute $a \& b$, a / b , $a \wedge b$ for these manually by converting a and b to binary number and then confirm the output after running program.

$$a = 7, b = 5$$

$$a = 17, b = 9$$

$$a = 91, b = 59$$

$a \& b$

$$a = 7, b = 5$$

$$\begin{array}{r} a = 1, 1, 1 \\ b = 1, 0, 1 \\ \hline 1, 0, 1 \end{array}$$

a / b

$$\begin{array}{r} a = 1, 1, 1 \\ b = 1, 0, 1 \\ \hline 1, 1, 1 \end{array}$$

$a \wedge b$

$$\begin{array}{r} a = 1, 1, 1 \\ b = 1, 0, 1 \\ \hline 0, 1, 0 \end{array}$$

$$a = 17, b = 9$$

$a \& b$

$$a = 10001$$

$$\begin{array}{r} b = 01001 \\ \hline 00001 \end{array}$$

a / b

$$\begin{array}{r} 10001 \\ 01001 \\ \hline 11001 \end{array}$$

$a \wedge b$

$$\begin{array}{r} 10001 \\ 01001 \\ \hline 11000 \end{array}$$

$$a = 91, b = 59$$

$a \& b$

$$a = 1011011$$

$$\begin{array}{r} b = 0111011 \\ \hline 0011011 \end{array}$$

a / b

$$\begin{array}{r} 1011011 \\ 0111011 \\ \hline 1111011 \end{array}$$

$a \wedge b$

$$\begin{array}{r} 1011011 \\ 0111011 \\ \hline 1100011 \end{array}$$

find binary equivalent of 27, 144, 52, 9, 7, 0

$$27 = 11011$$

$$144 = 10010000$$

$$52 = 110100$$

$$9 = 1001$$

$$7 = 111$$

$$0 = 000$$

Find if a given number is number is power of 2 //
Explore on logarithm function - base, exponent etc.

$\log()$ method return the natural logarithm (base e) of a double value as a parameter. there are various cases:

1. If the argument is NaN or less than zero, the result is NaN.
2. If the argument is positive infinity, then the result is positive infinity.
3. If the argument is positive zero or negative zero, then the result is negative infinity.