

1. Since this program is limited to 8 bits, the max number is $2^8 - 1$ or 255. The min number is 0.
2. I tested to see if the program was working correctly through trial and error. I tried simple numbers like 1, 2, and 3. Then some bigger inputs like 55, 100, and 125.
3. Display convert your number to binary!

Display enter an integer

Get integer

Set integer to answer

Set binary1 to 0

Set binary2 to 0

Set binary4 to 0

Set binary8 to 0

Set binary16 to 0

Set binary32 to 0

Set binary64 to 0

Set binary128 to 0

If (integer/128 > 1 or integer/128 =1)

Set binary128 to 1

Set integer to integer mod 128

If integer/64 >1 or integer/64 =1)

Set binary64 to 1

Set integer to integer mod 64

If integer/32 >1 or integer/32 =1)

Set binary32 to 1

Set integer to integer mod 32

If integer/16 >1 or integer/16 =1)

Set binary16 to 1

Set integer to integer mod 16

If integer/8 >1 or integer/8 =1)

Set binary8 to 1

Set integer to integer mod 8

If integer/4 >1 or integer/4 =1)

Set binary4 to 1

Set integer to integer mod 4

If integer/2 >1 or integer/2 =1)

Set binary2 to 1

Set integer to integer mod 2

If integer/1 >1 or integer/1 =1)

Set binary1 to 1

Set integer to integer mod 1

Display

(join(join(join(join(join(join(join(join(binary128)binary64)binary32)binary16)binary8)binary4)binary2)binary1)