Conversion steps:

1. Divide the number by 2.
2. Get the integer quotient for the next iteration.
3. Get the remainder for the binary digit.
4. Repeat the steps until the quotient is equal to 0.

The binary number is the sequence of remainders in reverse order.

Example #1: Convert 13_{10} to binary:

Division by 2	Quotient	Remainder
13/2	6	1
6/2	3	0
3/2	1	1
1/2	0	1

So $13_{10} = 1101_2$

Example #2: Convert 16_{10} to binary:

Division by 2	Quotient	Remainder
16/2	8	0
8/2	4	0
4/2	2	0
2/2	1	0
1/2	0	1

So $16_{10} = 10000_2$

Example #3: Convert 123_{10} to binary:

Division by 2	Quotient	Remainder
123/2	61	1
61/2	30	1
30/2	15	0
15/2	7	1
7/2	3	1
3/2	1	1
1/2	0	1

So $123_{10} = 1111011_2$