## Binary Division

To perform binary division follow the following steps:

1. Align the divisor $(\mathrm{Y})$ with the most significant end of the dividend. Let the portion of the dividend from its MSB to its bit aligned with the LSB of the divisor be denoted X.
2. Compare $X$ and $Y$.
a) If $\mathrm{X}>=\mathrm{Y}$, the quotient bit is 1 and perform the subtraction $\mathrm{X}-\mathrm{Y}$.
b) If $\mathrm{X}<\mathrm{Y}$, the quotient bit is 0 and do not perform any subtractions.
3. Shift $Y$ one bit to the right and go to step 2.

## Example:



