Binary Numbers: Introduction

A Binary Number is made up of only 0s and 1s. There is no 2,3,4,5,6,7,8 or 9 in Binary.
Example of a Binary Number

$$110100$$

Binary Addition

Revision of fundamental operations for binary addition

- $0 + 0 \rightarrow 0$
- $0 + 1 \rightarrow 1$
- $1 + 0 \rightarrow 1$
- $1 + 1 \rightarrow 0$, carry 1
- $1 + 1 + 1 \rightarrow 1$, carry 1

Binary Addition

Exercises:

(i) $101 + 11$

(ii) $111 + 111$

(iii) $1010 + 1010$

(iv) $11101 + 1010$

(v) $11011 + 11111$