

Date 03 Oct 2023 Page 29Day - 16Conversion of Number Systems* Decimal to binary:

2	13	1
2	6	0
2	3	1
	1	

$$\Rightarrow a = 2, \quad b = 5, \quad c = 8,$$

$$258$$

$$\text{ans} = a + bx$$

$$= \frac{a}{2} \times 10 + \frac{b}{5}$$

$$= 25$$

$$\text{Ex: } 25 \times 10 + 8$$

$$= 258$$

$$3624$$

$$\Rightarrow 3$$

$$\Rightarrow 3 \times 10 + 6 = 36$$

$$\Rightarrow 36 \times 10 + 2 = 362$$

$$\Rightarrow 362 \times 10 + 4 = 3624$$

$$\Rightarrow \text{ans} = 0$$

$$\Rightarrow \text{ans} = \text{ans} \times 10 + \text{num}$$

$$\Rightarrow \text{For reverse}$$

$$6 \quad 4 \quad 9 \quad 2$$

$$\text{ans} = 6 \times 10^0 + 0 = 6$$

$$\text{ans} = 4 \times 10^1 + 6 = 46$$

$$\text{So,}$$

$$\text{ans} = \text{ans} \times 10^i + \text{ans}$$

$$2946$$

$$2 \times 10^3 + 9 \times 10^2 + 4 \times 10^1 + 6 \times 10^0$$

