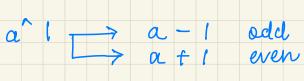
Lecture 9: Bit Manipulations-1 Converting any system to definal (100110) = $(37)_{10}$ $(13)_{8} = 8' \times 1 + 8' \times 3$ = (\\) Converting from decimal to binary 7024 + + 8 + + 1 dividing by 2 184 end reverse the remainders



$$all \rightarrow a$$
 $a+l$

$$(11)_{10} = (1011)_{2}$$

$$(22)_{10} = (10110)_{2}$$

$$(44)_{10} = (101100)_{2}$$

$$11 < 1 = = 11 + 2$$
left shift operator
$$11 > 1 \quad \text{right shift operator}$$

$$= = 11 / 2$$
Check & 6th bit is 0×10^{-1}

$$x > (k-1) & 1$$

$$x > (k-1) & 1$$

(26) wount the number of bits which are ON

Brute Force

ant = 0

while
$$x = 0$$
:

 $x = 0$:

return ent

Touck

unt = 0
while
$$x$$
:
 $\alpha = \alpha \ell (x-1)$
unt $\ell = 1$

