Bitwise Operator

- These operators are performed on the bits of the data and not as the single whole data unit
- The operations available here are

& - and

| - or

^ - xor

~ - not

<< - left shift

>> - Right Shift

- Its working

bit 1	bit 2	bit 1 & bit 2
0	0	0
1	0	0
0	1	0
1	1	1

bit 1	bit 2	bit 1 | bit 2
0	0	0
1	0	1
0	1	1
1	1	1

bit 1	bit 2	bit 1 ^ bit 2
0	0	0
1	0	1
0	1	1
1	1	0

- If you are making device drivers , systems program, System application , core system program and in general if a person is working more close towards electronic there this operator is used

- Left and Right shift

int x = 5 , y;

X = 0 0 0 0 0 1 0 1

0 0 0 0 0 1 0 1

- When you shift all the bits on left hand side by one space then 5 will get multiplied by 2 , if you move them by 2 space it will be multiplied by 4

- Here signed bit is not included , if the number is positive then it will be positive and vice versa