**this** is a constant pointer.

insertion sort mini swaps & graph nodes wala method

sorting sometimes reduce time complexity/ or it some solves

in array try to make a mark.

Sometime use two hashMaps.

Inversion-merge sort

String try to reach upto dp

Hcf\*lcm=product of two nos

Hcf using while faster way

a,b,temp while(any greater than 0) temp =other other =one%other one=temp

**power** calculation faster

while (y > 0) { do it by odd even

if ((y & 1)==1)

res =(res \* x);

y = y >> 1;

x =(x\*x) % p;

for **multiply** large nos

static int multiply(int x, int res[], int res\_size)

{

int carry = 0; // Initialize carry

// One by one multiply n with individual

// digits of res[]

for (int i = 0; i < res\_size; i++)

{

int prod = res[i] \* x + carry;

res[i] = prod % 10; // Store last digit of

// 'prod' in res[]

carry = prod/10; // Put rest in carry

}

// Put carry in res and increase result size

while (carry!=0)

{

res[res\_size] = carry % 10;

carry = carry / 10;

res\_size++;

}

return res\_size;

}

}

int foo = Integer.parseInt(string, base);

To get 1st set bit  **a&(~a-1) by** and in xor 1st “1” indicate place where bits are diff in two no.

For 2 power a & a-1==0

Use regular expression to extract data

Always take care of -ve number

For repeated

|  |
| --- |
| bitset=0 |
|  | if((bitset & (1<<digit)) >= 1) |
|  | return digit; |
|  | else //if not present then set the corresponding bit |
|  | bitset |= (1<<digit); |

For msb 1 take log…

Log return msb 1

Modulus fails for -ve number.

For product try left and right array.