g++ demo.cpp -o demo (every time after saving)

to run in cmd

-o \_\_\_\_\_ creates a file with name \_\_\_\_\_\_

We can normally then type \_\_\_\_\_\_ to run the code ….

Data types

1 byte = 8bits

Integer : - 4 bytes (1,-1,100) MSB = 1 -ve integer **bydefault signed**

For unsigned integers max range : - {2^32} – 1

For signed integers max range : - {2^31} – 1 as 1 bit i.e. most significant bit used for sign

Total number stored are 2\*(2^31 – 1) - 1 (for 0 as zero is counted twice)

Float : - 4 byte (1.54) upto 7 decimal places

If decimal is required for bigger **double** is used i.e. 8 byte

CHAR : - 1 byte

Char to ascii and ascii to binary

Boolean : - 1 byte true or false

Long : - 8 bytes ….

Short : - 2 bytes ….

Sizeof(var) gives size of var ….

#include<iostream>

# -> preprocessor directive used to include

<iostream> header file for taking input and printing output

\n break line

\t tab space ….

Int a;

Cin>>a;

Operators: -

Binary : - +,-,\*,/ on two variabbles

Uniary : - on single operand ++ --

Pre post both

BITWISE AND , BITWISE OR , BOTWISE XOR , BITWISE ~ complement ….

&,|,^,~

Left shift << 4<<1 one bit left shift

Right shift >> 4>>1 one bit right

^ different gives 1 same gives 0

a << n ----------------------🡪 a \* 2^n

a>> n ----------------------🡪 a/2^n

condition? (if true satetement) : (if false statement) ternary operator

**Always use float variable when storing the value of pow() function or as it return floating value and floating variable are give output like 10^2 = 99.999999999999992 which when converted to int gets wrong……**

**From prime or not check till sqrt(n) in loop F**