Pascal triangles:
nth row: nC0+nC1+nC2+……nCn

Check sign of the integer(a*b):
int sign=(A<0)^(B<0)?(-1):1;

Check data type of variable:
Include <typeinfo>
Int k;
Cout<<typeid(k).name() <<endl;

OR

Making list:
```
list<int> ml = { 10, 20, 30 };
```

min(), max(), takes only two arguments.

If there is a number a that divides number n there always exist another number n/a that is a factor of n

Convert Character into integer: char c=A[i], ==> c - '0' will give integer

For making number always positive:

abs() for **int**
fabs() for **double**
fabsf() for **float**

Running code: cntrl+f5

Printing output in a same line: cout<< arr[i]<<"\t";

For division (dividing 2 numbers) :
Integer division: n the expression 1 / 6, both numbers are integers. This means that this division will perform integer division, which results in 0.
Float division:
To do a double division, one number has to be a double: 1.0 / 6 **OR** (float)n **/** (float)m

- Remainder: (a % b)

- For all type of pattern questions:
  - See the relation b/w row and number given
  - Then see the pattern row wise and use loop step wise like 1st loop for how many space, then 2nd loop for number/ pattern.

- TO remove the last digit from a number**: N/10** and to get last digit: **N%10**

- To print **float** and **double** up to specific number of decimal places use:
  - #include <iomanip>
  - Double e;
  - Float d;

  - cout << fixed << setprecision(3) << d << endl;
  - cout << fixed << setprecision(9) << e << endl;

  OR

  std::cout << std::fixed << std::setprecision(3) << d << endl;

  std::cout << std::fixed << std::setprecision(9) << e << endl;

- To check if true or not:
  Isprime: we can do it by taking Boolean function

- switch..case Statement: Syntax

```
switch (expression) {
case constant1:

// code to be executed if

// expression is equal to constant1;

break;


case constant2:

// code to be executed if

// expression is equal to constant2;

break;

.

.

.

default:

// code to be executed if

// expression doesn't match any constant

}
```

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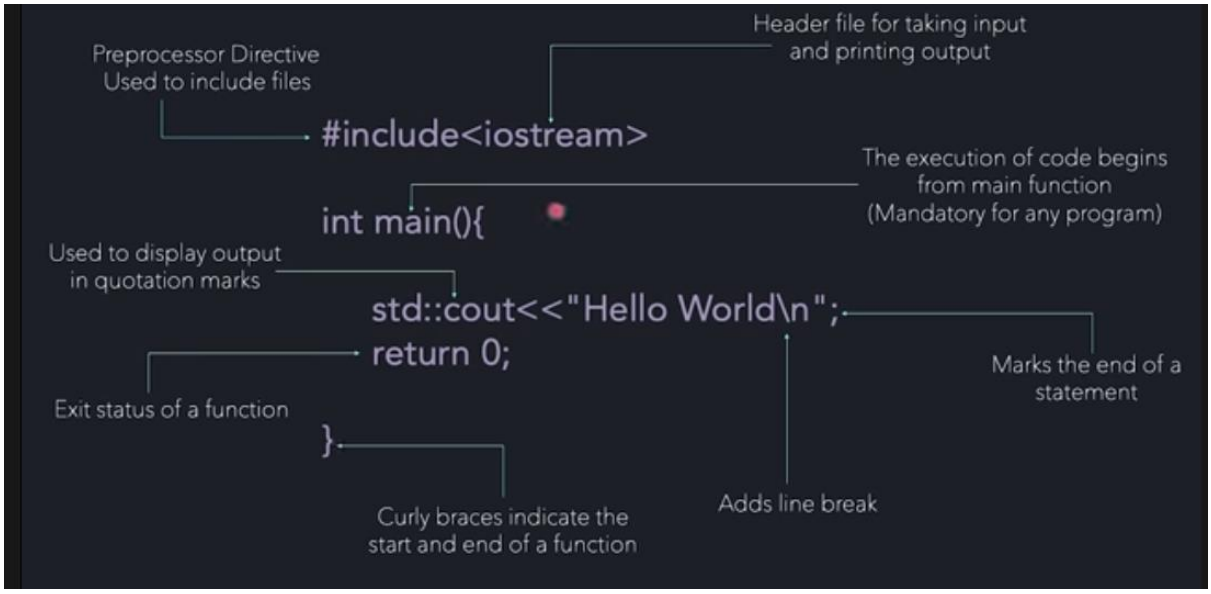
SUMMARY

- Counting (Natural) numbers: 1,2,3,4,5,6,7…
- Whole numbers: 0,1,2,3,4,5,6,7…
- Integers: …,-5,-4,-3,-2,-1,0,1,2,3,4,5,…
- Rational numbers: $-5,-4,-\frac{13}{4},-2,-1,0,\frac{1}{8},1,\frac{2}{3},2,\frac{7}{3},5$
- Irrational numbers: $\pi,\sqrt{2},\sqrt{3},\sqrt{5},\sqrt{7}$
- Real numbers: $-5,-4,-\frac{13}{4},-2,-1,0,\frac{1}{8},1,\frac{2}{3},2,\frac{7}{3},5,\pi,\sqrt{3},\sqrt{5},\sqrt{7}$

DATA TYPES:

1. Int-4bytes
2. Float-4bytes
3. Double-8bytes
4. Char-1byte
5. Wchar_t (wide char)-2bytes
6. Bool-1byte

```
#include<iostream>
Using namespace std;
```



#Condition? X:Y