Pointers

->Pointer is a variable which is used for storing the address of data.

->There are 2 types of variables

1) Data variables used for storing data:

Example int x=10,

Here ‘x’ is declared as integer type which holds the value ‘10’
Lets assume that ‘x’ take 2 bytes in machine and let it be 200/201
Then at this position the value of ‘10’ stored.

2) Address variable used for storing address:

Example int *p;

// variable ‘p’ is declare along with ‘*’ (astric) which is of integer type.
P=&x;
// ‘p’ is assign to ‘x’ and from our previous case the value of x is ‘10’ which is at 200/201.

That means ‘x’ address is stored in ‘p’ but not its value i.e ‘10’
Lets assume that ‘p’ take 2 bytes in machine and let it be 300/301
Then at this position the address of ‘x’ stored i.e(200/201).

Use case:

Displaying outputs when we write inputs of pointers and addresses
Cout<< x; --10 //shows the value
Cout<< &x; --200 //Show the bytes position
Cout<< p; --200 //Shows the address of variable which it is holding

Cout<< &p; --300//Shows its own byte's position Cout<< *p; --10 //Shows the value of variable it is holding (Called as dereferencing).
Note:
Declaration int *p;
Initialization p=&x;
Dereferencing cout <<*p;