Day 04   If Else statement in C++"

$cin >> a >> b;$ — Extraction operator.

$cout << a, b;$
↳ Insertion operator.

Maths:

$a = 10;$	$2 \times 3 == 4$
(10 ko a k andr dalna)	$6 == 4$? NO So, ans will be 0 (false).
↳ assignment operator	
	$4 == 4$? Yes (so, ans will be 1 (true)
	↳ comparison operator.

* Type-Casting:-
(Ag & int hai tuo wo apny andr int e store kegya, ags chas hai tuo chas)

Type Casting:-
* eg

int a = 10;
chas e = 'b'   = ASCII Value: 99

∴ A = 65   (zada achi smj e g 3 sy ayegi.)
∴ a = 98

∴ b = 99

Example 1:-
a = c ?   ↳ Ab mai chahti hon
↓   k a k andr c ajye.
value
98
(a = c)
lekin c two directly
Ruk c chas hai and a   nahi askta na, so,
int, two a apny andr   c ki ASCII value
int e store kegya

$a = 100.$

iska matlab a k and integer
hi ayega Dates lye 'b' ki
ASCII value integer
di khaingy.

Example 02:-

int $a = b$

ab 'a' k and 'b' disectly Two
nahi askta na. essye

① ☐ b ☐ X
   a

⑨ ☐ 99 ☐ ✓   (b ki ASCII value ayegi)
   a

(9sko hi hum type-casting kehty hain)

Means: '1' data-type ko dossry data-type k
ands Stone kerwana.

Example 3:- (zada achi smj iss eg
                    sy ay gi.)

integer ← int a = 10;
character ← char c = 'b'

☐ 868 ☐ →aD   ☐ b ☐ aD
   a   c

→ Ab mai chahti thon k a ki
value ko 'b' k ands daal do,
ab, a ki value int (10) hai and c
ki value char (b) hai, tus mai 68 ka
AScu value dekhti and mai osko c
k ands rkdeti. 68 → ACII (d)

☐ D ☐ *   called type casting.
   c

→ Ab type casting k ande buhat jag ah hamara
data loss hony k chances hoty hain.

Example → 4bytes (means 32bits)

int a;
double d = 2387.9341

→ let say iske binary

8bytes memory deta hai.
(means 64 bits).

koi.
000___ |00 10101000| data store (jo chahye tha)

bapi data
loss hogaya ab kea 8bytes (64 bits) data
int → 4bytes (32) mai store hoskta hai?
No, its not possible.

That's y why I said, data loss in
type casting.

And Numbers move from (0-255).
and 1byte = 8bits.

[Sumary] " Age hum bary numbes ko
chofy k ands dalaingy tuo zror
data loss hoga, kuk 8bytes, 4byt
k ands kesy askty hain bala."

[Correct Sequence:] (NO data-loss)
" bool → char → Int → double "
1byte → 1byte → 4bytes → 8bytes

→ If else statement in c++:-

package = 8

8 > 10 ⟶ wrong (no)
if (package > 10)   tuo else wali print hogi.

{ cout << "accepted";
}

√ else

{ cout << "rejected";
}

→ If true means '1', and if else
means false and false means '0'.

< , <=   ==
> , >=

→   (All of these are comparioson operators)

→ Number is even or odd?
Agr tuo number even ho tuo isk
matlab hota hai k;

condition 01- num % 2 == 0   (iska matlab hai
(means Remeindel + modulus   k agr koi num 2
'0' hai).   se pura pura divide
condition 02- num % 2 == 1   horahai hai tuo wo even
                                    hai).
modulus
(means Remainder
'1' hai)

→ num, +ve, -ve, 0
↓

```
if (num > 0)
    { cout << "Number is positive" }
else                           // Ab else mai number -ve b
{if (num == 0)                 // hoskta hai and '0', Two
    { cout << 0;               // 1 or condition lagy gi.
    }
}
else
    { cout << "Number is negative" }.
```

Rule :-   if ────→ One time.
           else if ──→ Multiple time.
           else ────→ One time.

Structure

```
int main () {
    int num;
    cout << "Enter the Number";
    if (num > 0)
        { cout << "Positive";
        }
    else if (number == 0)
        { cout << "0";
        }
    else
        { cout << "Negative"; }
};
```

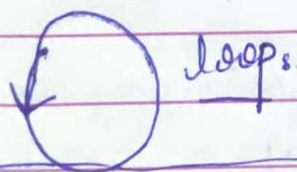vowel or consonnent

↓   ↓

(a, e, i, o, u)   b, c, d, --- (others excep vowels
                          are   consonnent).

. <u>NOTE</u>= single cotation k ander character ata hai, like this; 'a', and double cotation k ands string ata hai like this; "ab", "dog". etc.

→ if-else k case mai jesy hi 1 condition true hojati hai two phir baki conditions nhi chalien.

For Loop: jab koi b kaam repeatedly keswana ho, means baar baar keswana ho, two osklye we used loop.

 loops.

| Understand by Examples / Pseudo Codes |

→ CA, CA, CA, CA, CA → 5 times on screen

Count = 1	(Means count 1 sy
-----------	start kro)
Count ≤ 5	
"coder Army Print."	
Count = count +1	

• 1 ≤ 5 ✓ (true)
CA
count = 1+1=2 ✓

• 2 ≤ 5 (true)
CA
count = 2+1=3

• 3 ≤ 5 (true)
CA
count = 3+1=4

• 4 ≤ 5 (true)
CA
count = 4+1=5

• 5 ≤ 5 (true)
CA
count = 5+1=6

• 6 ≤ 5 (false)
Not p... anything

→ For loop (Syntax):   loop ka sequence.

Initialization

for (count = 1 ; count ≤ 5 ; count = count+1/(count ++)

{

{

    cout << "CA";   Loop break   increament.

}

↓

→ and mai initialize kisi b number sy

Rasksti hon, but its totally depends on condition.

→ batany ka meaq sad ye hai k ye chez

important nahi hai k mai hamesha 1

sy hi initialize kerwao gi.