

~~32 b.~~

## if-else statement in c++

Program to print sum of 2 number  
by taking user input.

```
#include <iostream>
```

```
using namespace std;
```

```
int main()
```

```
{
```

```
    int a, b;
```

```
    cout << "Enter num1\n";
```

```
    cin >> a;
```

```
    cout << "Enter num2\n";
```

```
    cin >> b;
```

```
    cout << a+b;
```

```
}
```

output:

Enter num1

10

Enter num2

20

30

<<< Insertion

>>> Extraction

$a = 10$

↑  
Assignment operator

$2 \times 2 == 4$

↑  
Comparison operator

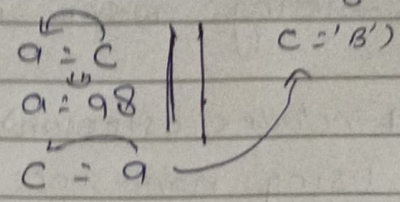
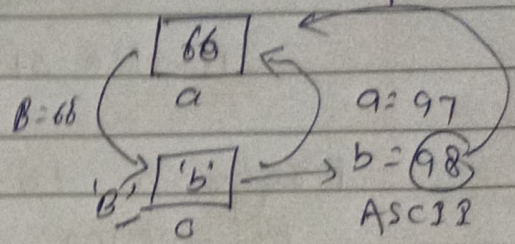
output = 0 - No

= 1 - Yes



int a = 66;

char c = 'b';



⇒

int a ;  
4 byte  
↓  
32 bits

double d = 2387.9341  
↓  
8 byte  
64 bits

Bigger data → Smaller data type  
double → int → char → bool

high chances of data loss

Smaller data type → Bigger data type  
bool → char → int → double

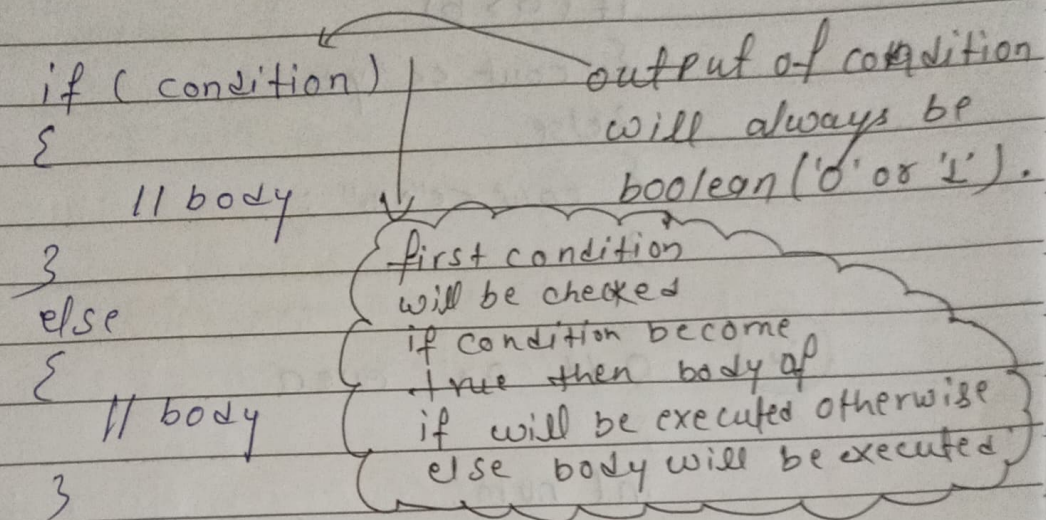
low chances of data loss.

Refer : Second.cpp



## if-else statement

### Conditional statement.



e.g. ①

```

int package = 20;
if (package > 10)
{
    cout << "Accepted";
}
else
{
    cout << "Rejected";
}
    
```

*11 ← true.*

output:  
Accepted.

①

```

int marks;
C>> marks;
if (marks > 33)
{
    cout << "Pass";
}
else
{
    cout << "Fail";
}
    
```

output:  
marks = 74  
Pass

Refer code if-else.cpp



(iii)

$a > b$

```
cin >> a >> b;
if (a > b)
{ cout << "yes";
} else
{ cout << "No";
}
```

(iv)

Odd or even

```
int num;
cin >> num;
if (num % 2 == 0)
{
    cout << "Even";
} else {
    cout << "odd";
}
```

(v) H/w if Age > 18 print Adult else Teenager.

if, elseif, else

(vi) Check num is +ve, -ve, or zero.

```
if (n > 0)
    cout << "Positive";
elseif (n == 0)
    cout << "zero";
else
    cout << "Negative";
```



vii) Vowel or Consonant ?

Refer code: vowel\_conso.cpp.

viii) Week:

1 → Monday

2 → Tuesday

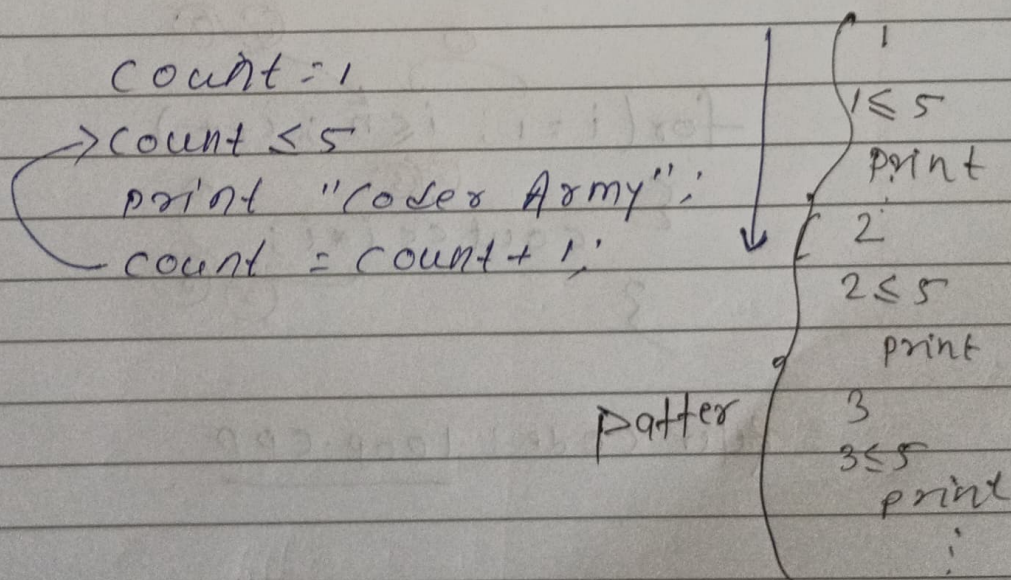
" "

Refer code: week.cpp.

## Loop

Need:

if we have to print your name 5 times then we can write "cout" statement 5 times but if you have to print some statement 100 times then we can't write 100 times "cout" statement, so the con to solve these problem the concept of loop came into picture.





# for loop

```
for( ; ; )  
{  
}
```

e.g

```
for(count=1; count<=5; count++)  
{  
    cout<<"coder Army";  
}
```

initialisation      condition      increment/decrement

①      ②/⑤      ③/⑥

Print square of 1 to n

1 → 1  
2 → 4  
3 → 9  
4 → 16  
5 → 25  
⋮

```
for(i=1; i<=n; i++)  
{  
    cout<<i*i;  
}
```

①      ②/⑤      ③/⑥      ④/⑦

Refer code: Loop.CPP



① Print All even no. till  $n$ .

let  $n = 10$ .

2, 4, 6, 8, 10

```
for(int i = 2; i <= n; i = i + 2)
```

```
{
```

```
    cout << i;
```

```
}
```

Refer code : LOOP.CPP.