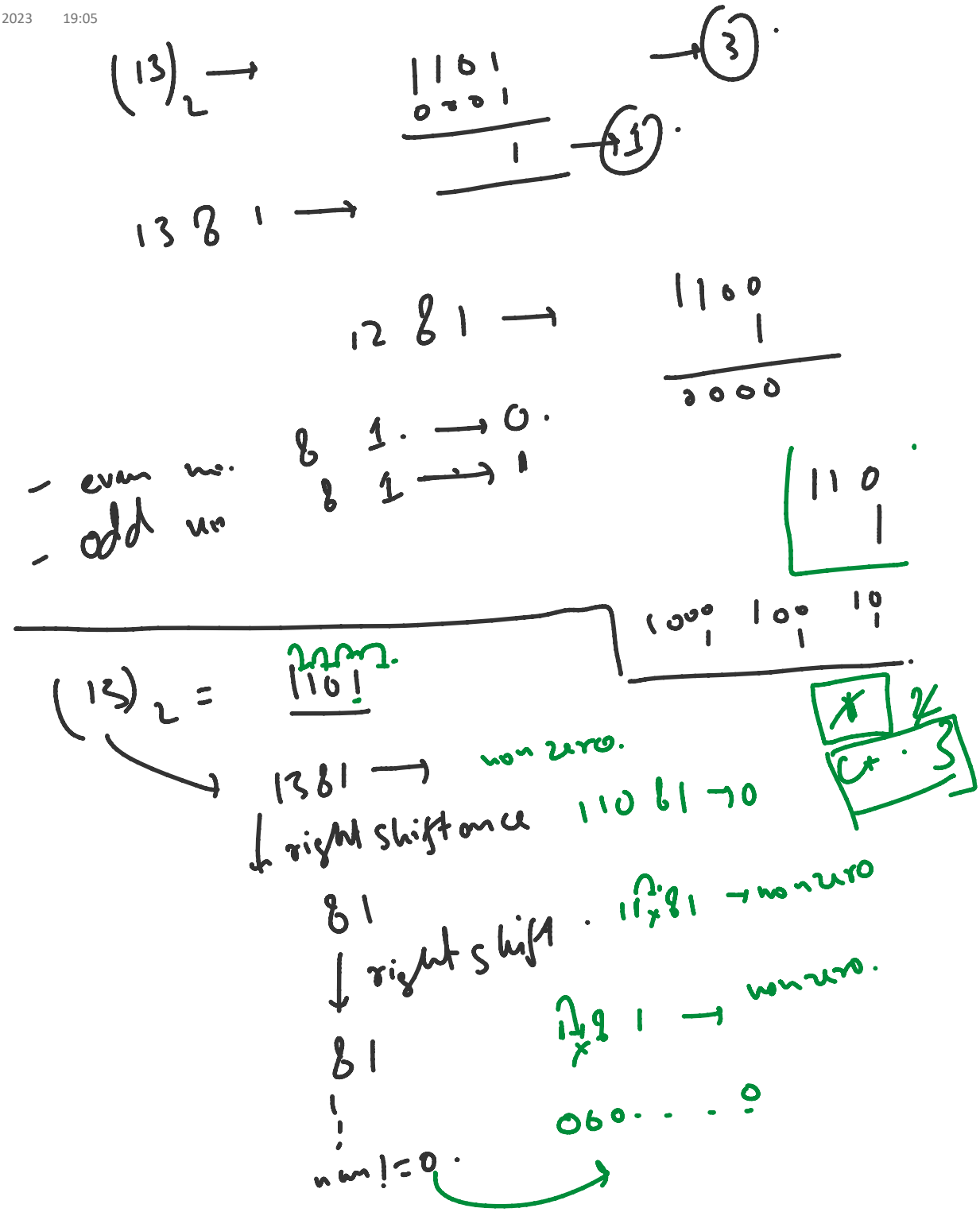
Basics

07 June 2023 19:05



initialization
while (condition)
{
tasks ;
updation ;
}

task...

updation;

}

syntax.

for (initialization; condition; updation)

{ tasks

}

for loop generally runs a fixed amount/number of times.

* we use for loop when we know the number of required iterations/repititions of a task.

* we use while loop if we don't know the no. of iterations prior.

300 + 20 + 1 = 321.

num = 123 → 321

rev = rev + num % 10

rev += num % 10

⇒ 3   num/10.

rev: 10 3 30 3200

num: 123 12 1 0

⇒ 3

num = num/10.

rev = rev*10 ✗.

12 % 10

= 2

1

loop → breaks.

rev / 10. print

321

---

(2) break;   (1) continue;

(1) continue;

If compiler / code encounters continue keyword; then compiler will skip all the code below that continue statement & go back to condition checking. → in that loop.

1 to 5 numbers. 3rd no. X

```
for (int i=1; i<=5; i++)
{     if (i==3)
         i++;  → in while loop
         continue;
```

i++;

i = 1, 2, 3, 4

{ if(... i++;) → in w...

continue;

cout << i << endl;

skip

}

1
2
4
5

4
5

odd no. print 1 to n.

```
i%2==0
  continue;
cout << i << endl;
```

---

② Break ;

If compiler / code encounters break statement, it skips the rest of the code below that statement in that loop & comes out of that loop.

---

1 to 10 numbers

1 to 7, 8, 9, 10 (X)

```
if i==7
  break;
```

X → out of that loop.

```
for {
```

loop se bahar aayega.

→ for {

for → is loop se bahar aayega

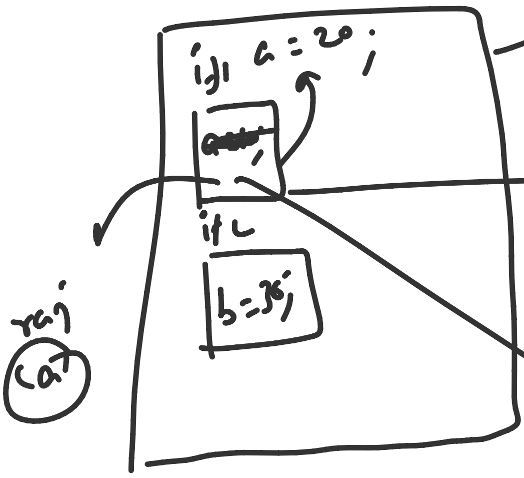
{

→ break; execute

}

Anything b/w a set of curly braces is called as scope or visibility.
And a variable of particular scope or visibility can be accessed only in that scope

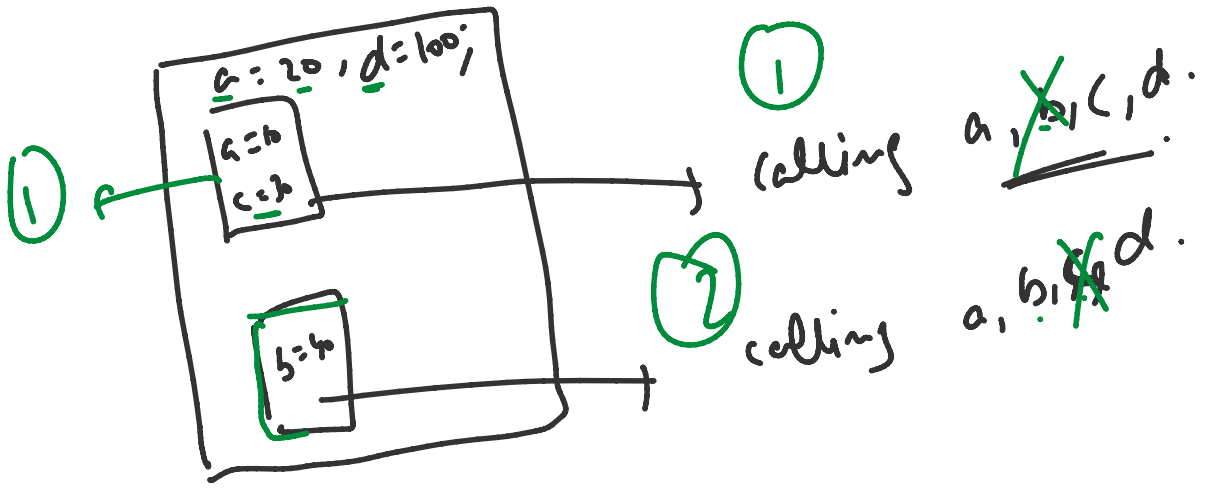
main prog. memory.



→ society. = [Raj] Raj

→ home/ apartment in a society.

→ cout << a << endl;
→ preference.



1 → 10, error, 30, 100

2 → 20, 40, error, 100

You can come out of a narrower scope into a wider scope but can't go / access values of another narrower scope in that wider scope

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Mostly → 3 types of white spaces

- space ' ' — spaces
- '\t' — tab.
- '\n' — enter, new line.

cin → white spaces ignore

when you type input in console / terminal