

~~for~~ Loop

for (^①init ; ^②condition ; ^④incr) {

x ^③{

 ~

 ~

 ~

}

$$\underline{a = 30}$$

$$\underline{b = 50}$$

80

$$b = \underline{30}$$

$$a = a + b = (\underline{80}) - \underline{30}$$

$$\underline{a = 50}$$

$$n = \underline{7}$$

$$\underline{\text{count}} = 0, 1$$

$$i = 2$$

2, 3, 5, 7, 11, 13, 17 -

$$\underline{7 \% 2} = \underline{0}$$

$$7 \% 3 = 0$$

$$7 \% 4 = 0$$

$$7 \% 5 = 0$$

$$\textcircled{7} \% 6 = 0$$

$$\rightarrow 8 \% 2 = 0$$

$$\rightarrow 8 \% 2 == 0$$

```

count = 0
for (i = 1; i < n; i++) {
    if (n % i == 0) {
        count++
    }
}

```

```

if (count == 0)
    cout << "prime"
else
    cout << "not prime"

```

0 1 2 3 4 5 6 7 8 9 10 11 12 13
~~0~~ ~~1~~ ~~2~~ ~~3~~ ~~4~~ ~~5~~ ~~6~~ ~~7~~ ~~8~~ ~~9~~ ~~10~~ ~~11~~ ~~12~~ ~~13~~
a b

```

a = 0, b = 1
for (int i = 1; i < n; i++) {
    a = b;
    b = a + b;
}

```

n = 10
c = 1, 2, 3, 5, 8, 13

b = 13
a = 8