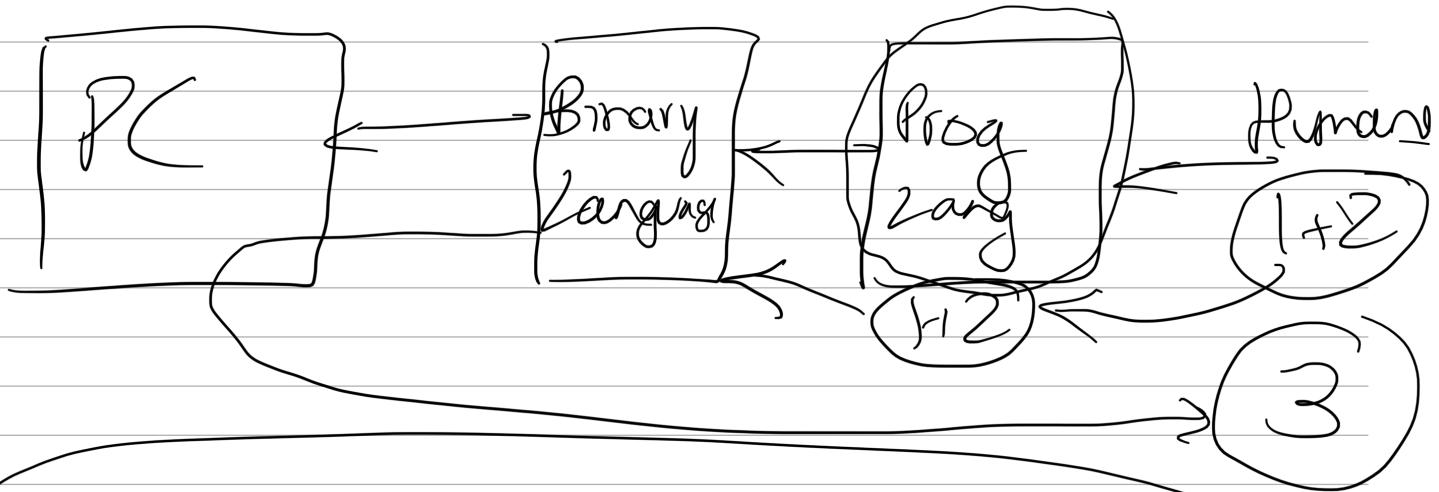
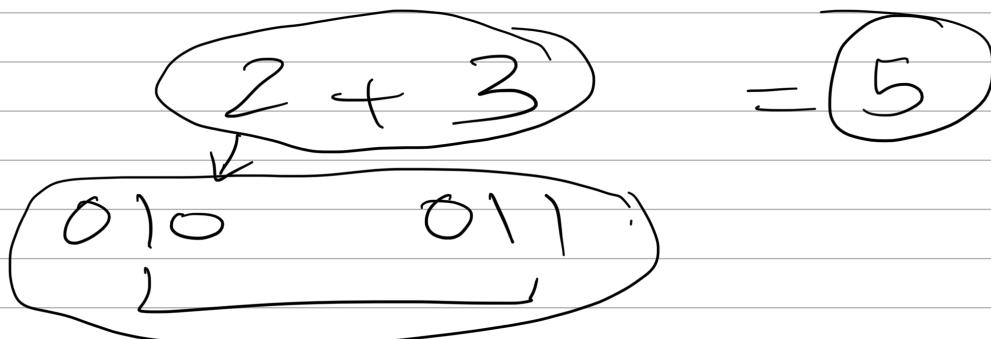
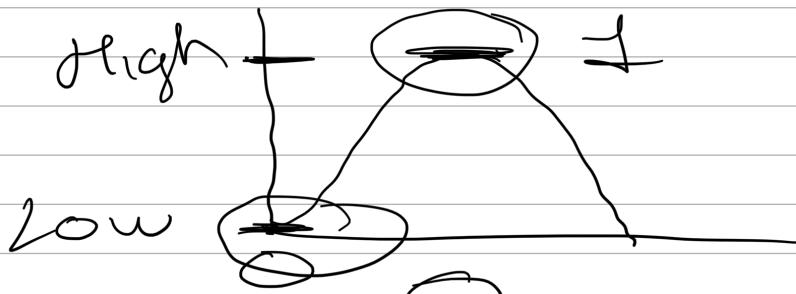


1960s



English → Grammatical Rules
Prog Language → Syntax

Logic

Logic is a set of principles that should be arranged so that Computer can perform task.

LOGIC, NOT LOGIC

$$x = 3$$

$$a = 3$$

is

$$\boxed{x = a}$$

True

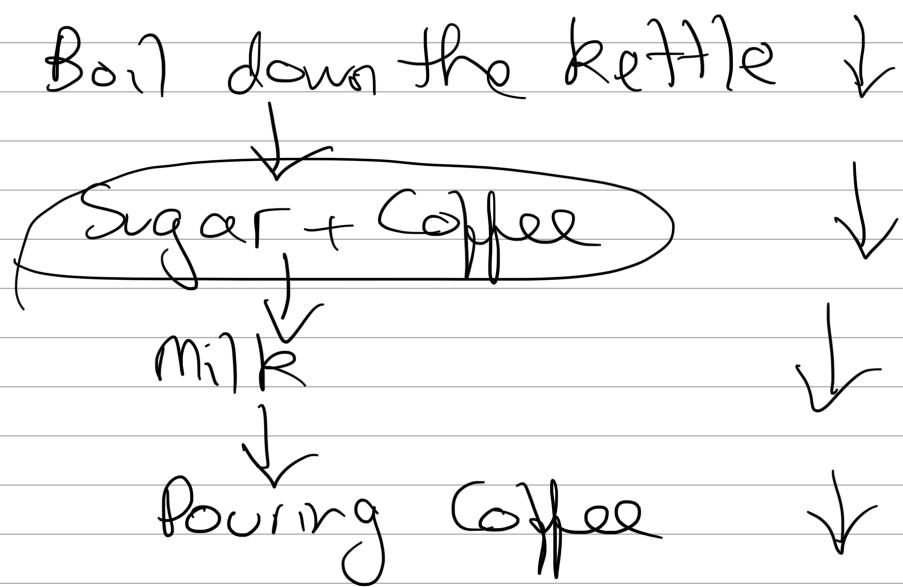
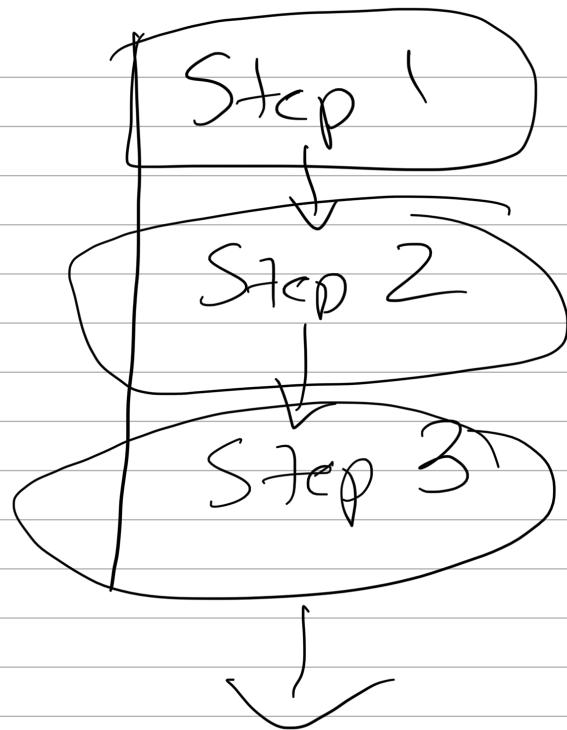
$$b = 2$$

$$c = 3$$

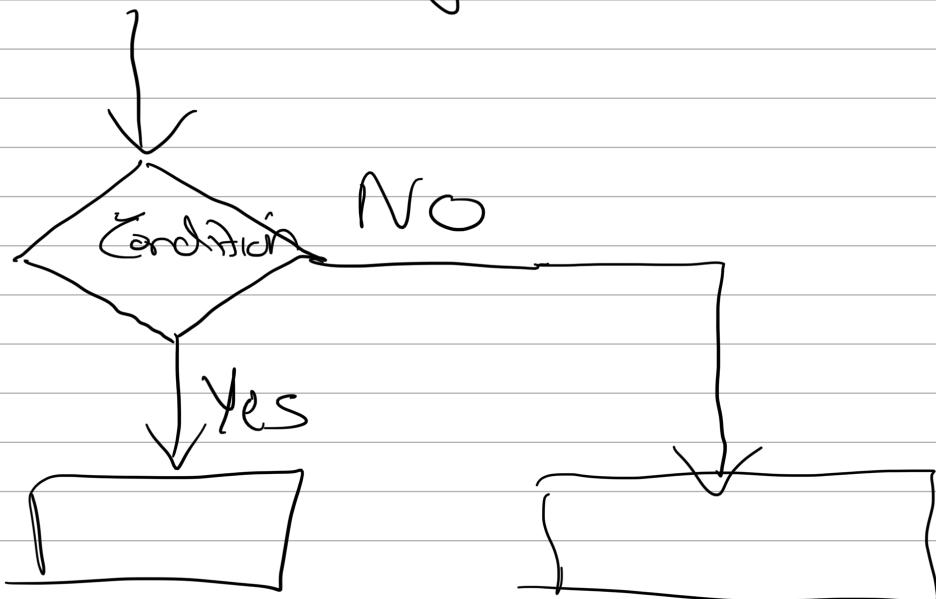
$$\boxed{b = c}$$

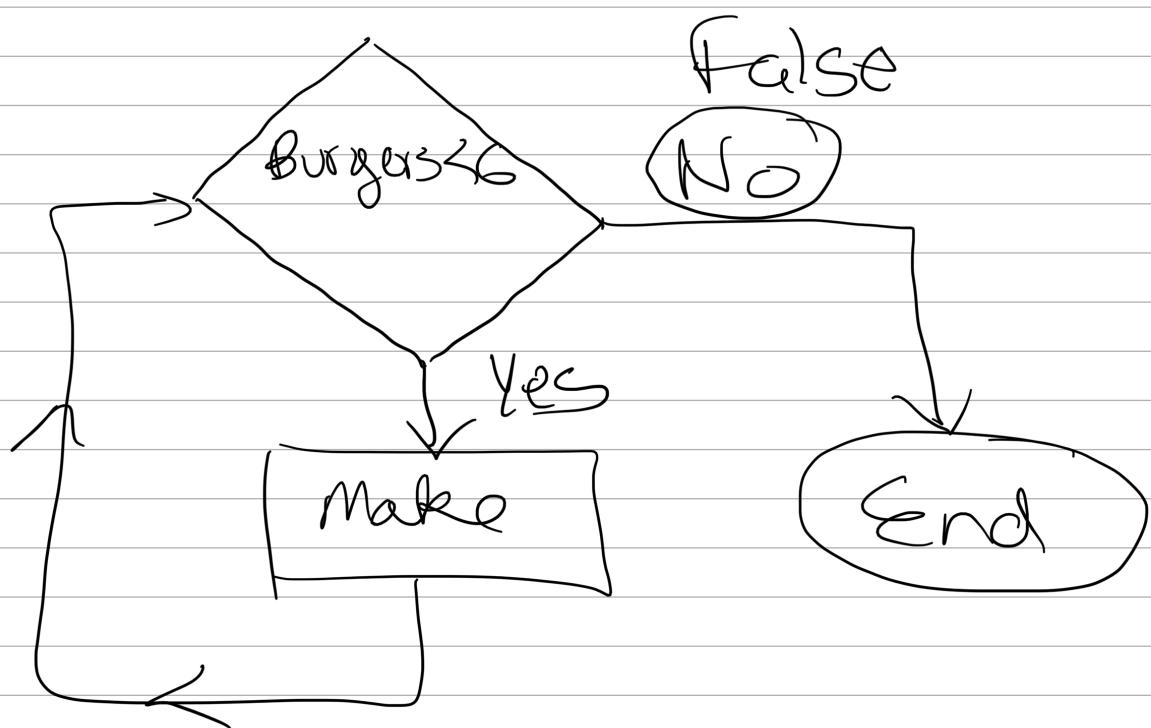
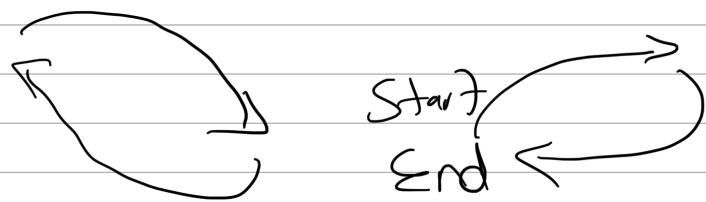
False



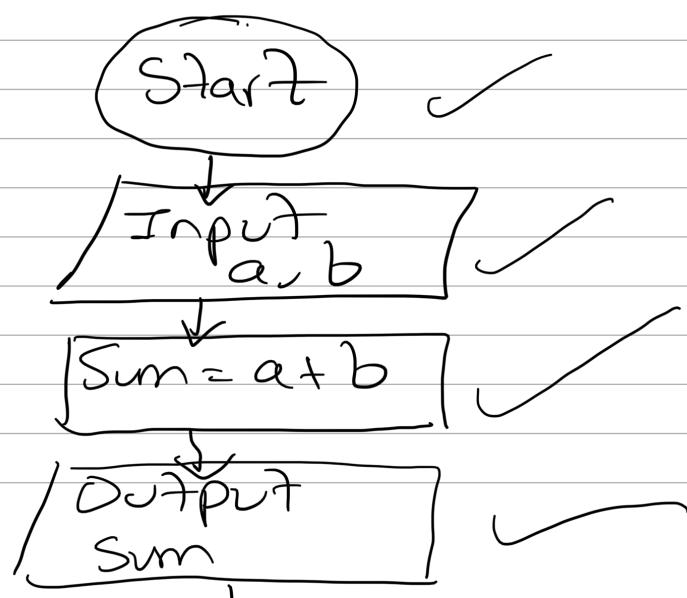


2. Selection Logic :



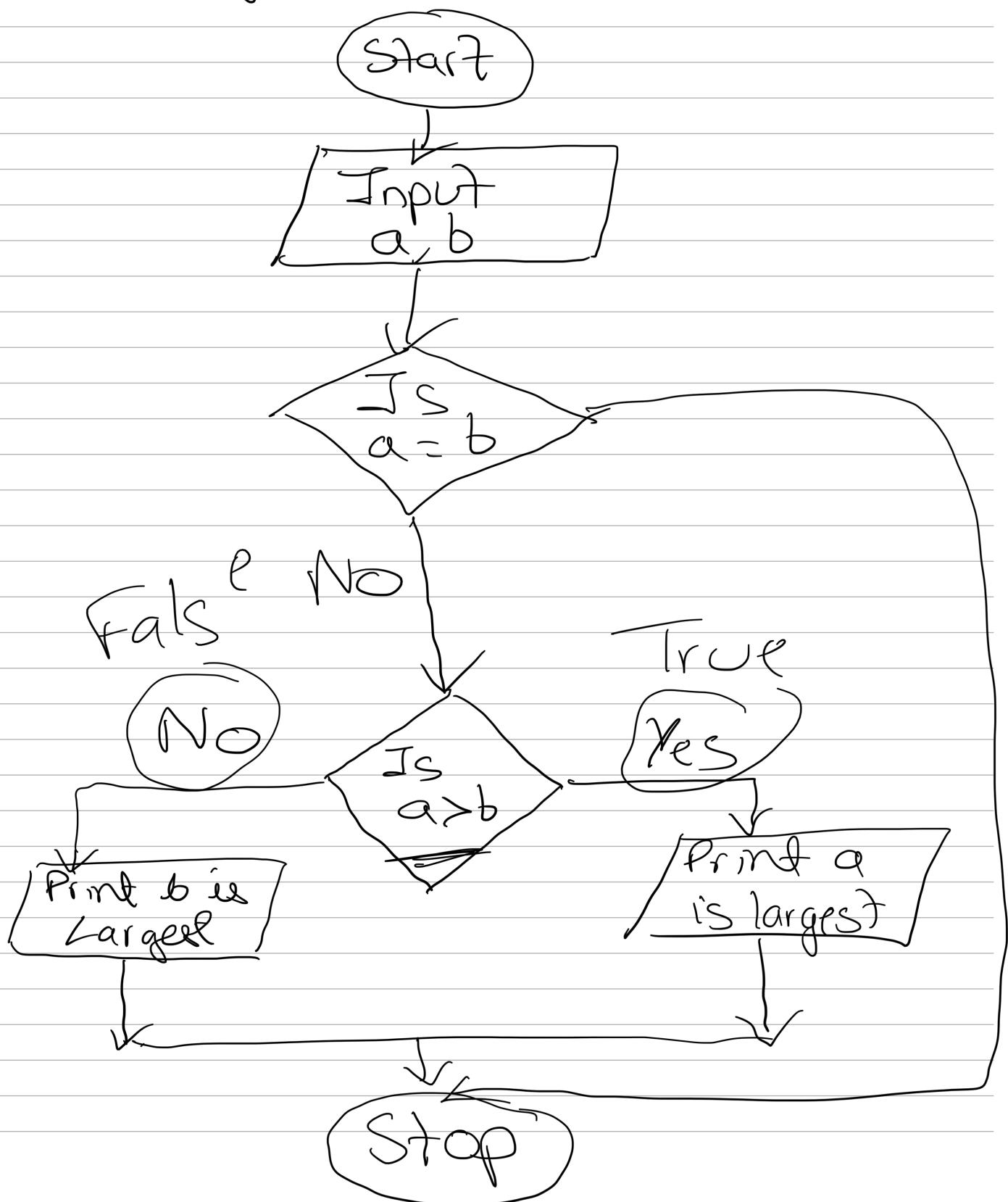


1. Add 2 numbers entered by
No





→ Draw a flowchart to find greatest among 2 no?



$$a = b$$

$$a = \underline{\underline{b}}$$

$$a = 3$$

$$b = \overline{5}$$

$$a = \underline{\underline{b}}$$

$$a = \underline{\underline{3}}$$

$$\% \%$$

$$\underline{2}$$

$$4 \div 2$$

$$2)$$

$$\underline{\underline{4}}$$

$$(0)$$

$$\underline{x}$$

$$5 \div 2$$

$$= 1$$

$$2$$

$$\sqrt{1) \underline{\underline{5}}}$$

$$\underline{10}$$

$$(11 \div 2) = 1$$

$$\cancel{1}$$

Algorithm + Syntax = Code

1. Start

2. Input 2 num from user

3. Now check $\{ a > b$
goto step 4, else goto
step 5

4. Print a is greater, goto stop

5. Print b is greater

6. Stop

Q. Find the input No is even or odd.

Q Print the Largest among
3 diff no entered by
User?

a

3

b

5

c

7

Start

$a = 2$
 $b = 3$

~~$c = 5$~~

Input a, b, c

false

Is $a > b$

True

True

Is
 $b > c$

False

Is
 $a > c$

True

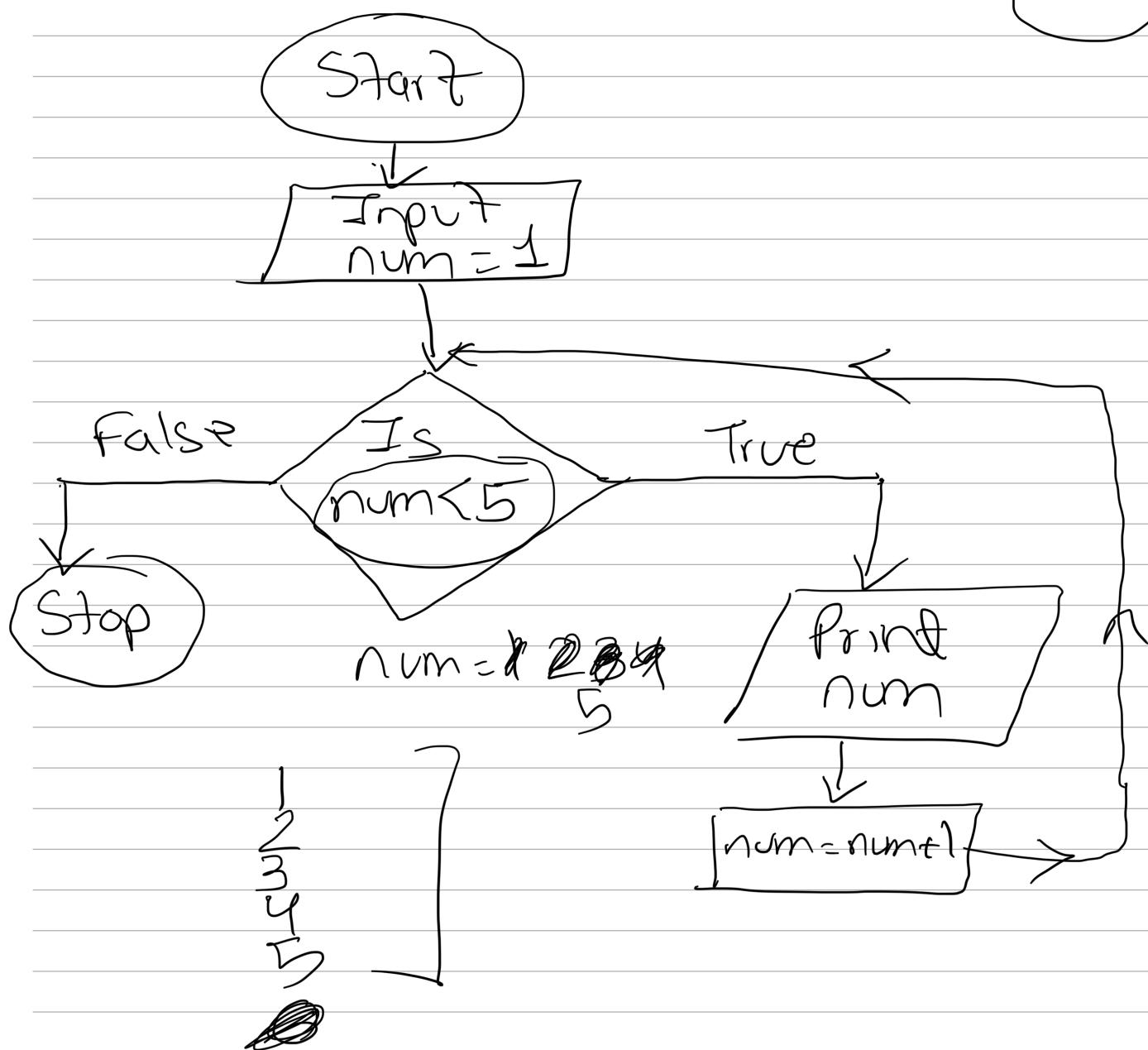
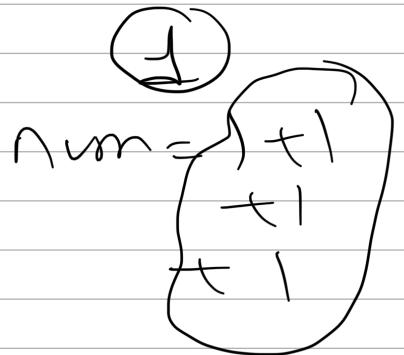
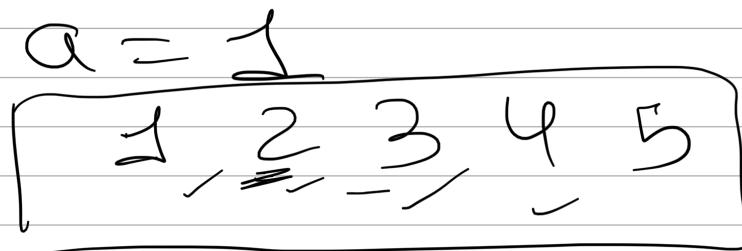
Print
 b

Print
 c

Print
 a

Stop

Q3 Draw a flowchart
to print input number
5 times?



① Print the first 5 multiples of 7.

7, 14, 21, 28, 35

② First 5 multiples of 7

7, 14, 21, 28, 35

num = 1

num < 5

$$\text{num} = 1 \times 7$$

$$= 7 \times 2$$

$$= 7 \times 3$$

$$= 7 \times 4$$

③

Input a

Start

a = 1

Counter = 1

If
cnt < 5

False
Stop

True

Print cnt * 7

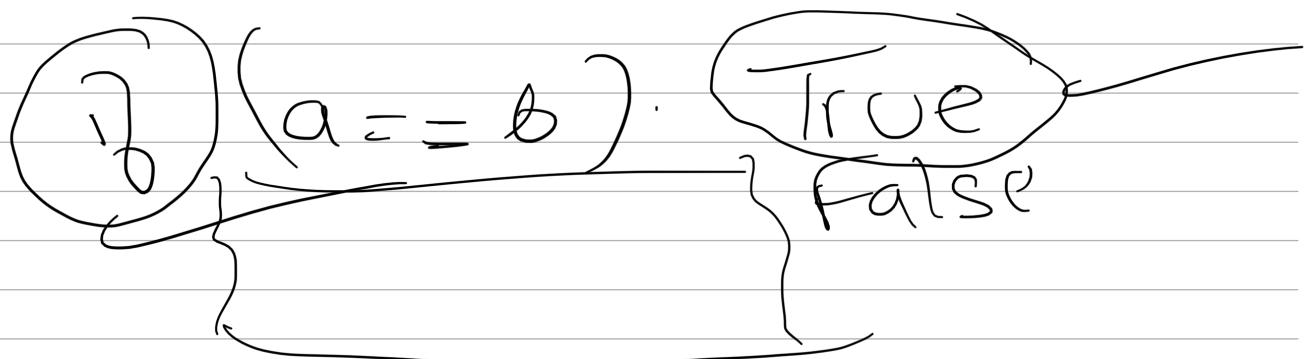
$cnt = cnt + 1$

Output:

7
14
21
28
35

~~$cnt = 2 \quad 2 \quad 6$~~

5 * 7



Algorithm

1 Start

2. Counter = 1

3. Now check if $cnt < 6$ step 4
else goto step 5

4. Print ($cnt * 7$)

5. Counter = Counter + 1

6. Stop

Q. Print Numbers from 1 to 15?

Q

$$ax^2 + bx + c = 0$$

$$x^2 - 6x + 9 = 0$$

$$9 - \underline{6x} + 9 = 0$$

$$D = b^2 - 4ac$$

$$\frac{1}{a}x^2 - \frac{6}{a}x + \frac{9}{a} = 0$$

$$ax^2 + bx + c = 0$$

$$\frac{1}{1}x^2 - \frac{6}{1}x + 9 = 0$$

$$D = 6^2 - 4 \times 1 \times 9 = 36 - 36$$

$$= 0$$

$$D \geq 0$$

Real Roots

$D < 0$
Imaginary

Q Find the root of a quadratic question?

