

1. Nested if
2. Conditional operator
3. If else if
4. typedef
5. Enum
6. switch

exp2 && exp1

case 1 exp && exp2

✓ $1996 \% 100 \neq 0$ 1996

- leap year

1994

- non leap year

✗ $2000 \% 100 \neq 0$

2000

- leap year

✗ $2100 \% 100 \neq 0$

2100

- non leap year

$1900 \% 100 \neq 0$

1900

- non leap year

$(exp1 \&\& exp2) || <exp3>$

✓ $1996 \% 4 == 0$ ✓ true

$1994 \% 4 == 0$ ✗ false

✓ $2000 \% 4 == 0$

✓ $2100 \% 4 == 0$

✓ $2000 \% 400 == 0$

case 2

century leap year

A → [✓]1
b ~~1~~ [✓]2
8 ~~1~~ ~~2~~ [✓]3
+ ~~1~~ ~~2~~ ~~3~~ (4) ✓

(1 + 2) = 3 * 5

(3) = 15
 Constant.

- ✓ ① uppercase 65-90
- ② lowercase 97-122
- ③ digit >=48 <=57
- ④ special.

```
if (num1 > num2)
    max = num1;
else
    max = num2;
```

++i ++ ;
 2 = (i = i + 1)

(2) = 5
 Constant.

$\text{num}_1 > \text{num}_2 ? (\text{max} = \text{num}_1) : (\text{max} = \text{num}_2);$

precedence is given to =

$(\text{num}_1 > \text{num}_2 ? \text{max} = \text{num}_1 : \text{max})$

$(2+3) = (8+1)$

$5 = 9$

result = num2

if num1 > num2 && num1 > num3

num1	num2	num3
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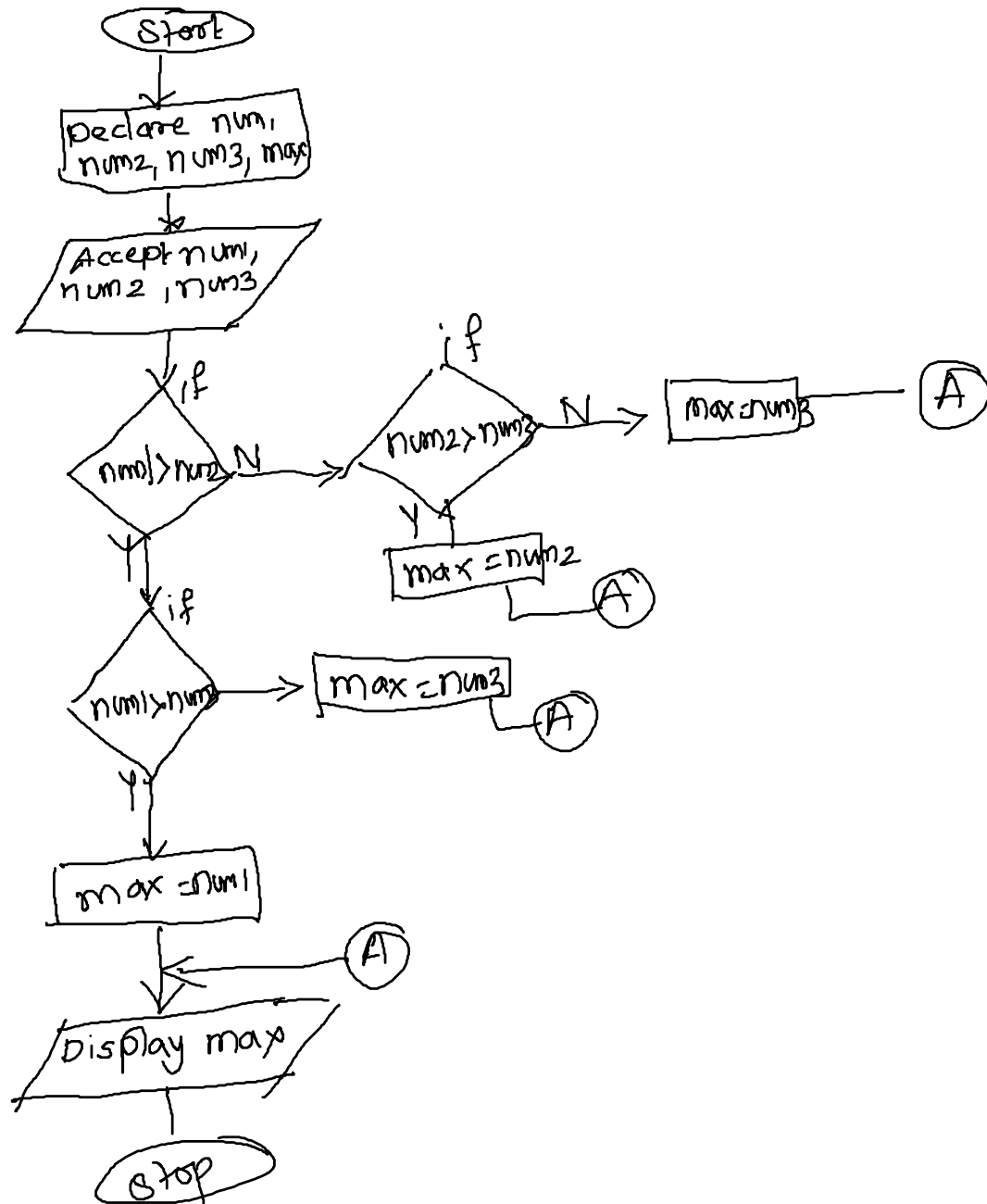
7	5	2
---	---	---

⑦	5	12
---	---	----

3	15	12
---	----	----

3	15	18
---	----	----

7 > 5 && 7 > 12



$$c = a \& b$$

7 & 13

76543210
 00000111
 $\& 00001103$

 00000101

 2^2 ~~2^1~~ 2^0 5
 $4 + 1 = 5$

$$\begin{array}{r}
 7 = 00000111 \\
 \wedge \\
 13 = 00001101 \\
 \hline
 00001010 \\
 \quad \quad \quad \begin{array}{c} 2 \\ 2 \end{array} \quad \begin{array}{c} \cancel{2} \\ \cancel{2} \end{array} \quad \begin{array}{c} \cancel{2} \\ \cancel{2} \end{array} \quad \begin{array}{c} \cancel{2} \\ \cancel{2} \end{array} \quad 0 \\
 = 8 + 2 \\
 = 10
 \end{array}$$

$$\begin{array}{cccc} \vee & 0 & 1 & 0 \\ & 1 & 0 & 1 \\ & 2 & 2 & 2 \end{array}$$

-8

$$\begin{array}{r}
 00001000 \\
 11110111 \\
 + \quad \quad \quad 1111 \\
 \hline
 \cancel{11111000}
 \end{array}$$

$$-8 < 1$$

$$-8 > 1$$

$$-8$$

$$1$$

→ find binary of 8

→ Apply 1's complement

→ Apply 2's complement

$$1 + 1 = 0 \text{ carry } 1$$

$$0 + 1 = 1$$