

# 1

01 October 2022 01:22

You have 15 Rs with you. You go to a shop and shopkeeper tells you price as 1 Rs per chocolate. He also tells you that you can get a chocolate in return of 3 wrappers. How many maximum chocolates you can eat?

15 → C  
15  
5  
1  
1

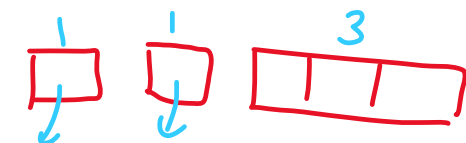
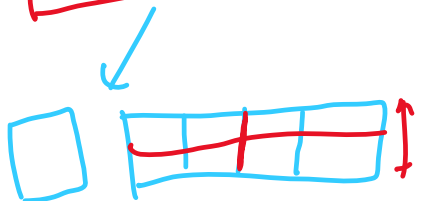
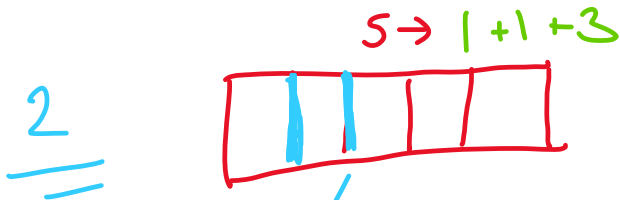
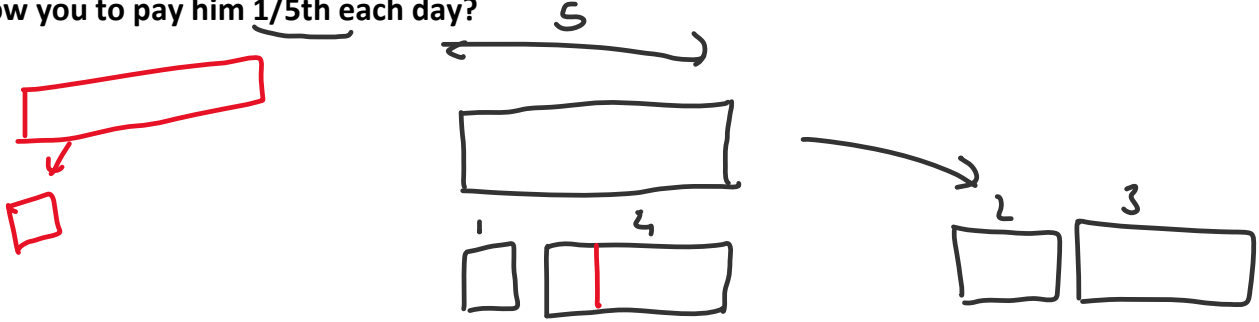
W  
0  
0  
2

5  
2+1  
= 3\*1 + 0

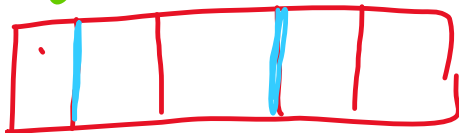
15+5+1+1  
W C  
15 → 5

5 = 3\*1 + 2

You have got someone working for you for five days and a gold bar to pay him. You must give them a piece of gold at the end of every day. What are the fewest number of cuts to the bar of gold that will allow you to pay him  $1/5$ th each day?

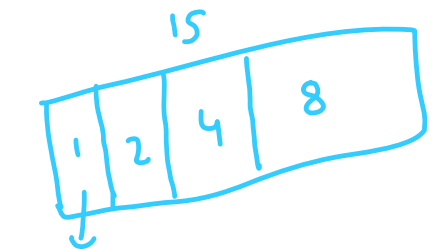


$$5 \Rightarrow 1 + 2 + 2$$



$$2 \times 0.5 = 1$$

$$1 + 1 = 2$$



0 <sup>th</sup>	U <sub>s</sub>	W
1	1 + 3	1 → 1
2	3	1 + 1 → 2
3	1 + 1	3 → 3
4	1	3 + 1 → 4
5	0	3 + 1 + 1 → 5

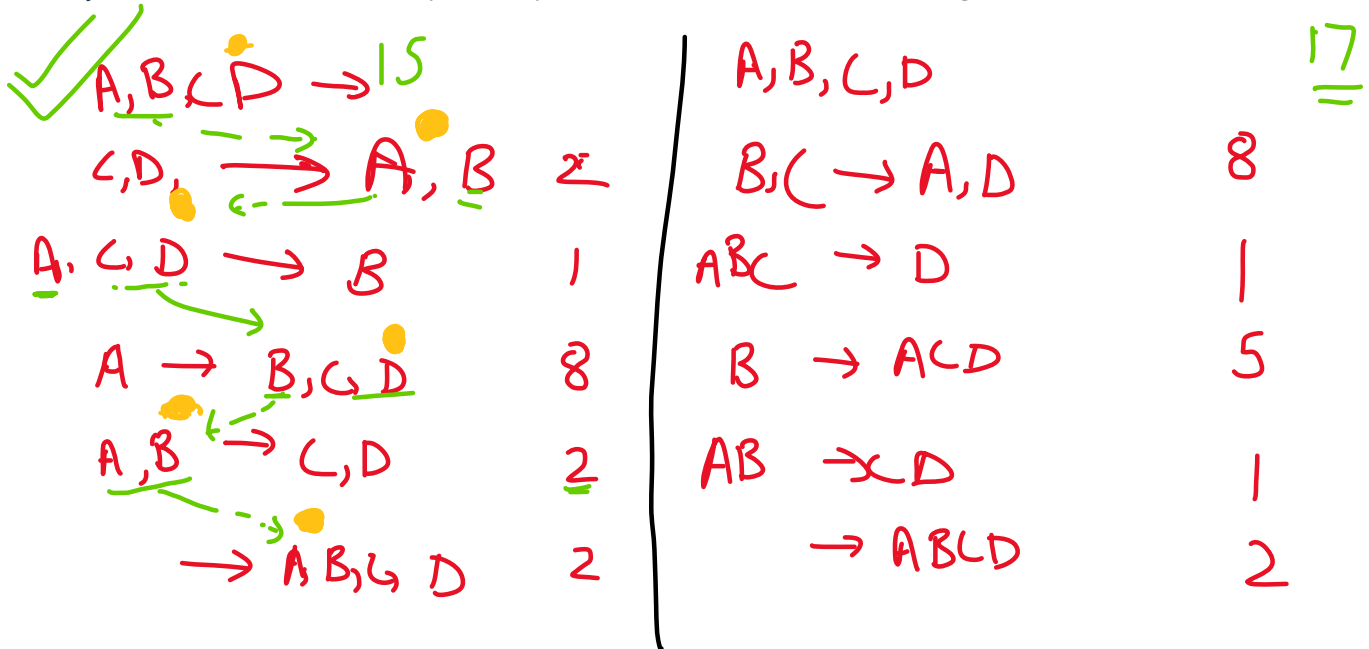
	U <sub>s</sub>	W
0 <sup>th</sup>	1 + 2 + 2	0
1 <sup>st</sup>	2 + 2	1
2 <sup>nd</sup>	2 + 1	2
3 <sup>rd</sup>	2	2 + 1
4 <sup>th</sup>	1	2 + 2
5 <sup>th</sup>	0	2 + 2 + 1

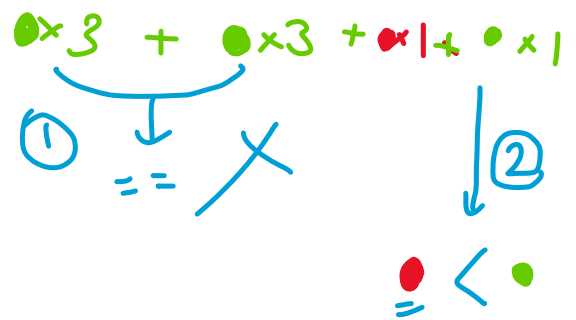
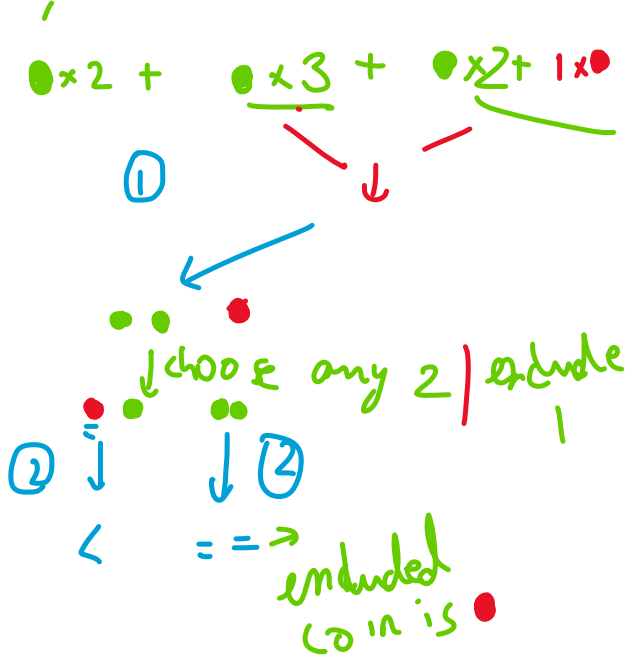
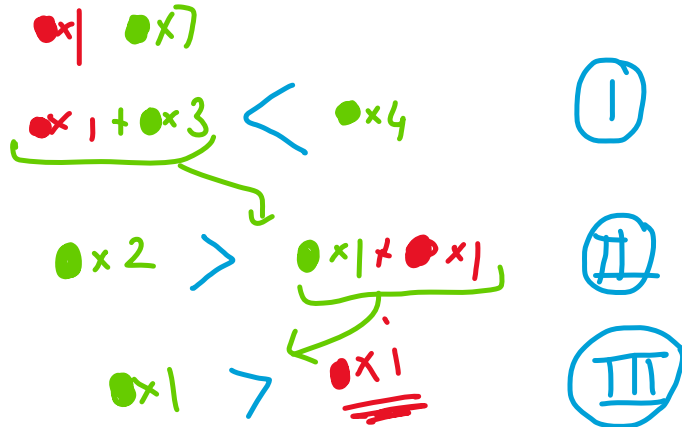
There are 4 persons (A, B, C and D) who want to cross a bridge in night.

1. A takes 1 minute to cross the bridge.
2. B takes 2 minutes to cross the bridge.
3. C takes 5 minutes to cross the bridge.
4. D takes 8 minutes to cross the bridge.

There is only one torch with them and the bridge cannot be crossed without the torch.

There cannot be more than two persons on the bridge at any time, and when two people cross the bridge together, they must move at the slower person's pace. Shortest time to cross the bridge?

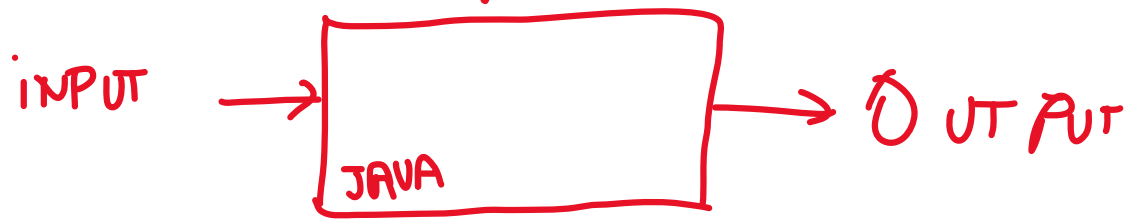




# FLOWCHART

01 October 2022 10:55

→ Sequential Steps



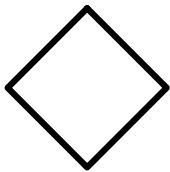
START/STOP



INPUT / OUTPUT



MATHEMATICAL COMPUTATION

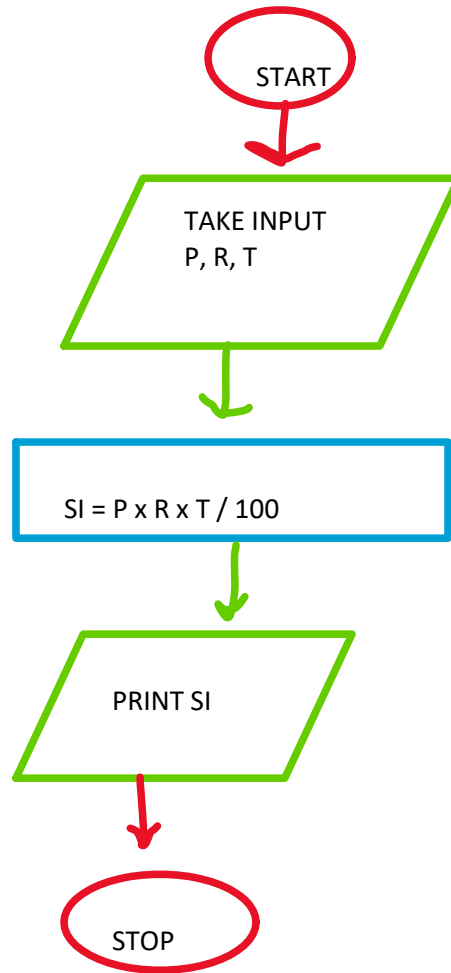


CONDITION -> DECISION



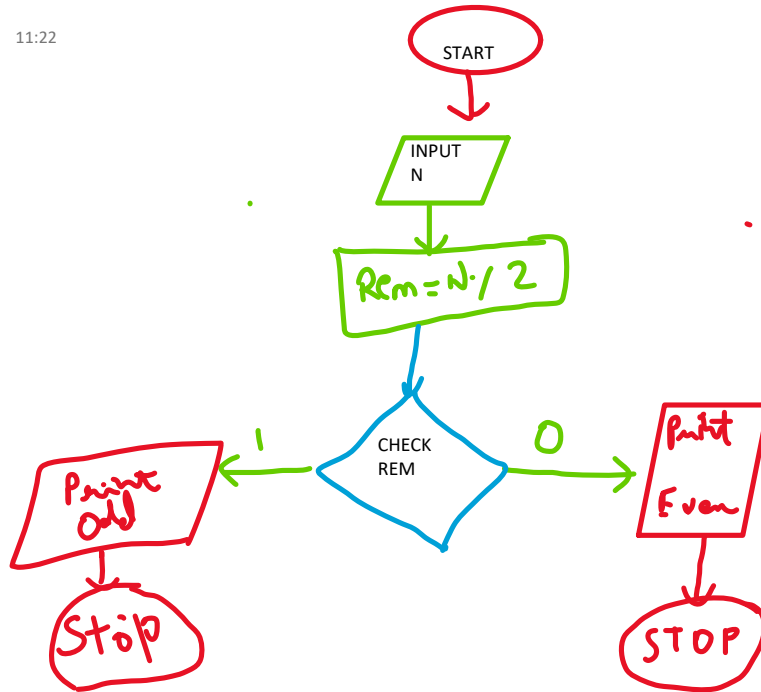
Data Flow

$$SI = \frac{PRT}{100}$$



## Odd Even

01 October 2022 11:22



• % → MODULUS

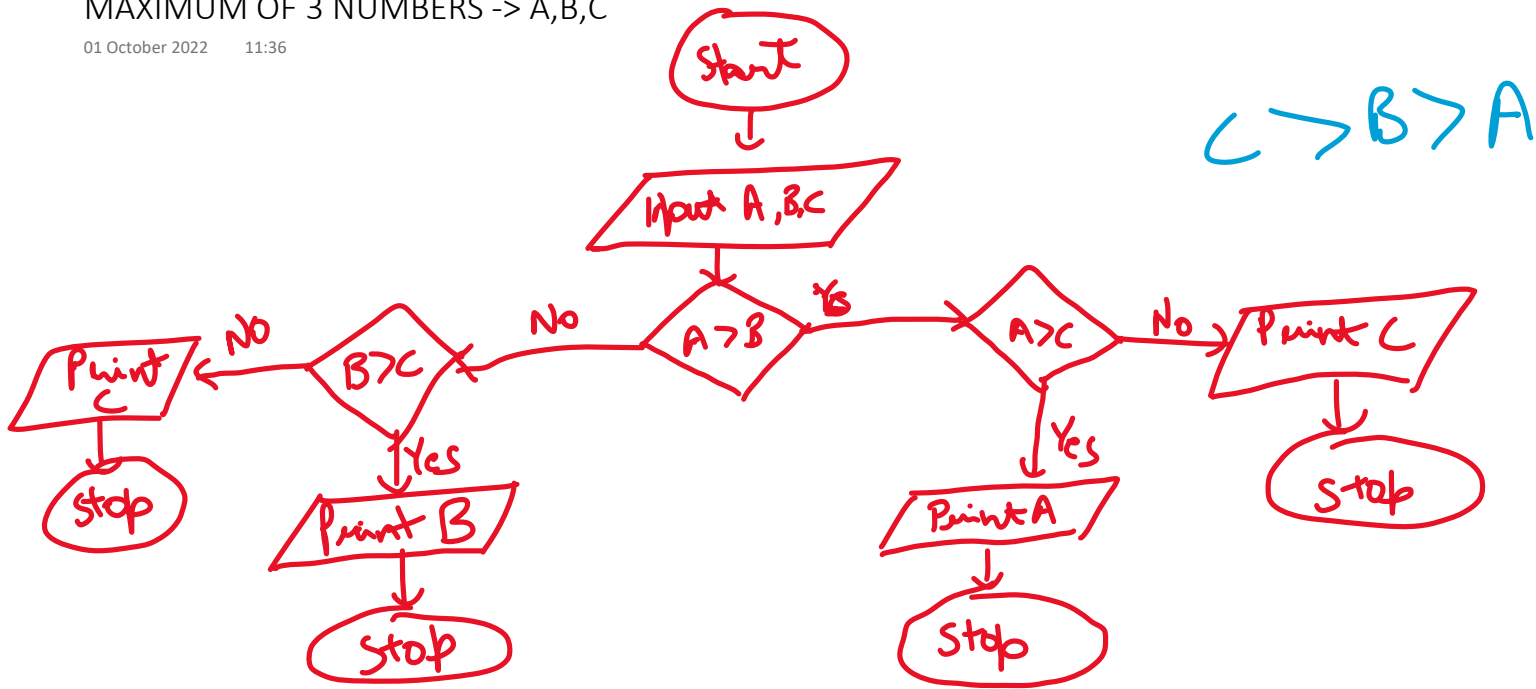
$$5 \cdot / \cdot 2 = 1$$

$$5 \cdot / \cdot 3 = 2$$

$$10 \cdot / \cdot 4 = 2$$

# MAXIMUM OF 3 NUMBERS -> A,B,C

01 October 2022 11:36





$80 < M \leq 100$   
 $60 < M \leq 80$   
 $50 < M \leq 60$   
 $40 < M \leq 50$   
 $30 < M \leq 40$   
 $M \leq 30$

# Marks

80-100	A
60-80	B
50-60	C
40-50	D
30-40	Pass
< 30	Fail