Mirror image

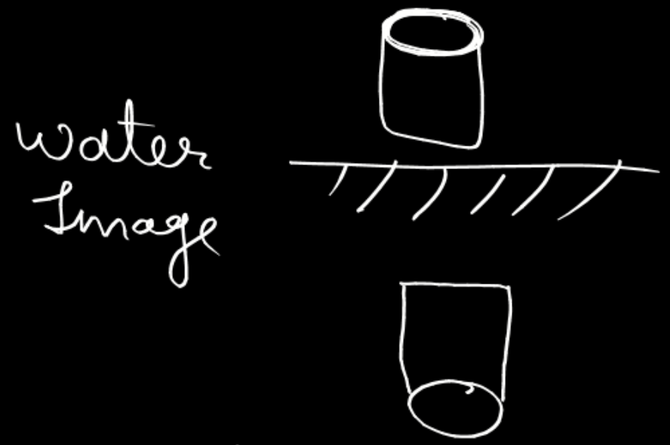
Concept

Mirror Image → Left (बाया) ⟷ Right (दाया)

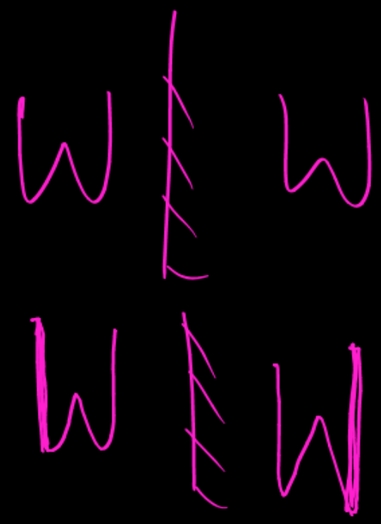
Water Image → Top (ऊपर) ⟷ Bottom (नीचे)

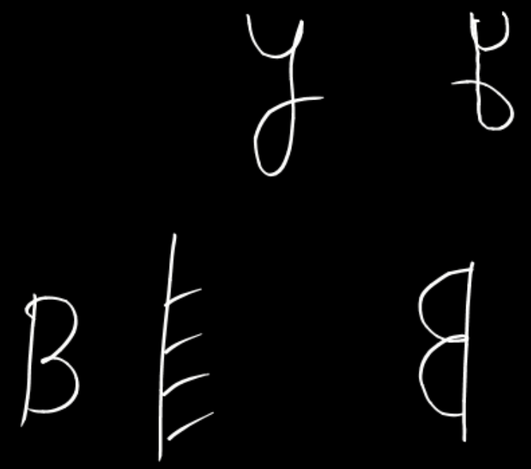
Mirror Image

A E A

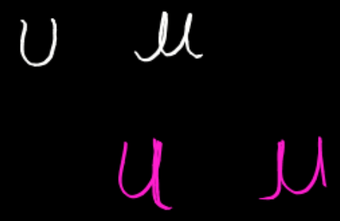


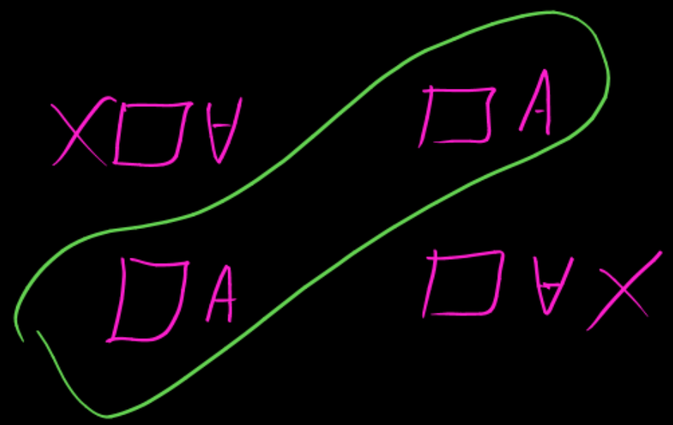
Letters	Mirror Images
A	A
B	B
C	C
D	D
E	E
F	F
G	G
H	H
I	I
J	J
K	K
L	L
M	M
N	N
O	O
P	P
Q	Q
R	R
S	S
T	T
U	U
V	V
W	W
X	X
Y	Y
Z	Z



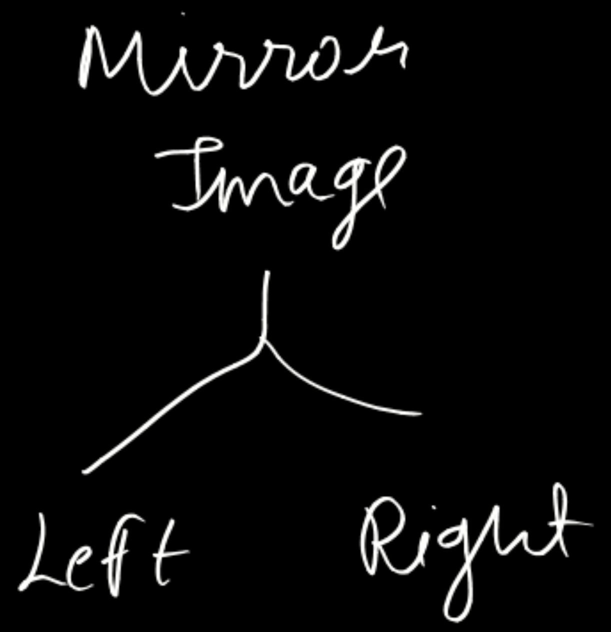


a	ɐ	n	ɳ
b	d	o	o
c	ɔ	p	q
d	b	q	p
e	ə	r	ɹ
f	ɟ	s	ƨ
g	ɓ	t	ʇ
h	ɥ	u	ʊ
i	ı	v	v
j	ɾ	w	w
k	ʞ	x	x
l	l	y	ʏ
m	ɯ	z	z

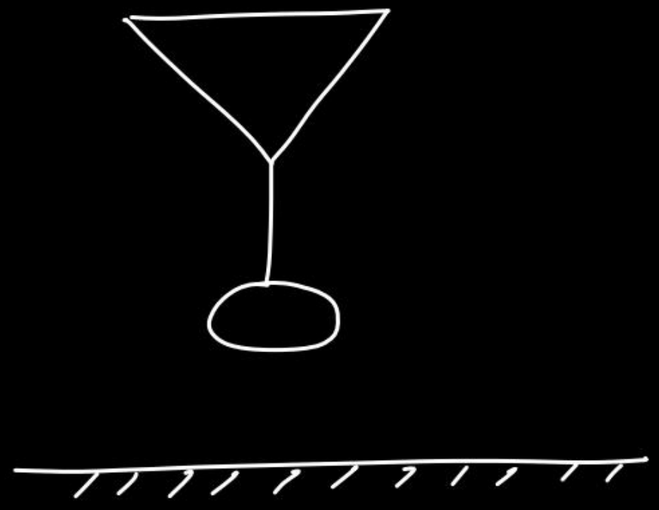




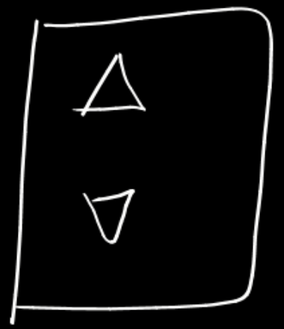
Numbers	Mirror Images
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9

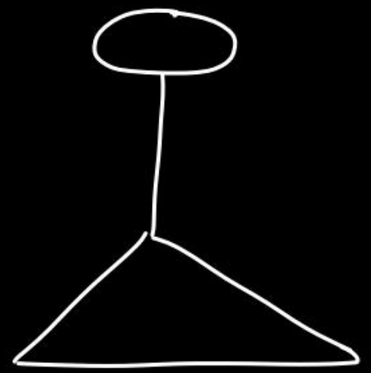


Eg ①



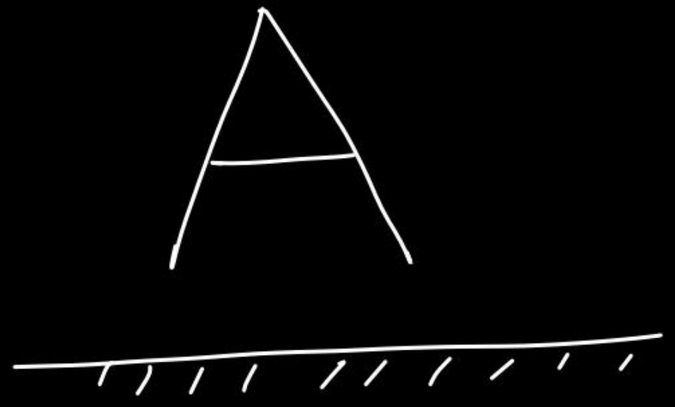
← Real Image



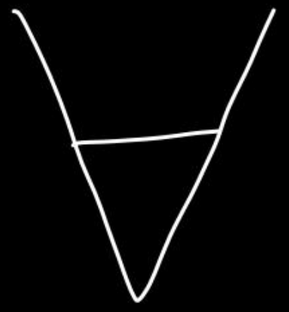


← Water Image

Eqⁿ ②.



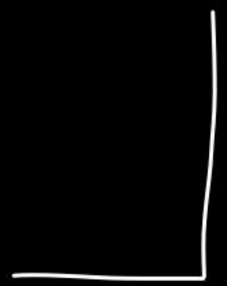
← Real Image



← water Image

Eqn (3).

Real Image



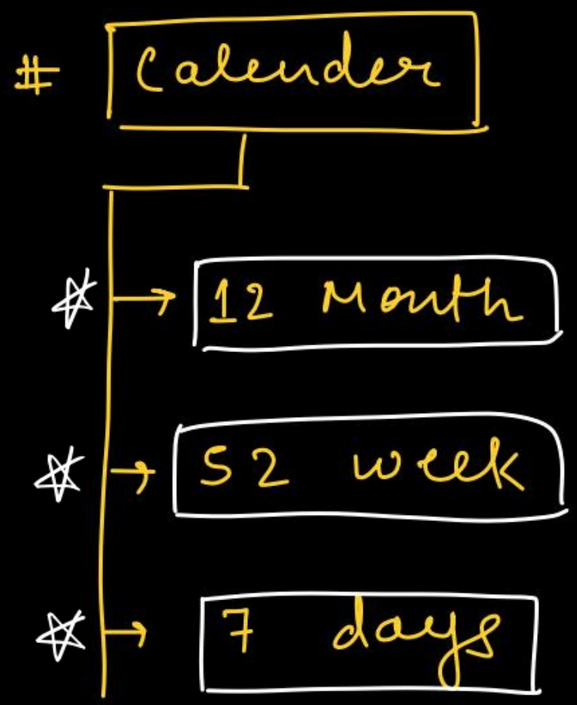
Mirror Image

Eg:- (4) MANGO

H.W:

Eg^n (5) 716R

Calendar


Calender
12 Month
52 week
7 days

Calender :-

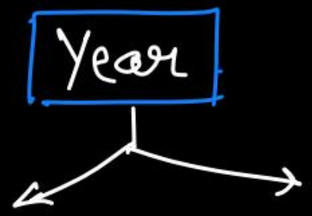
* Every 7 days → Day Repeat

OR

* 7 या 7 के multiple → Repeat"

* During calculation → 7 या 7 के multiple → 0 consider

* Year



Normal Year → 365 days → Feb 28 days

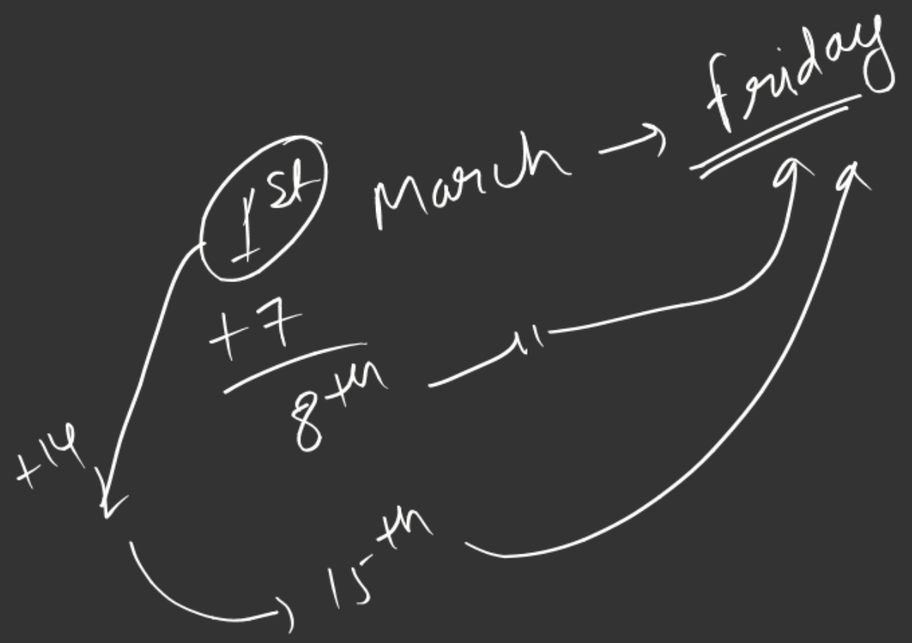
Leap Year → 366 days → Feb 29 days.

23 → Saturday

+7

30 → March → Saturday

7, 14, 21, 28


1st
March → Friday
+7
8th
+14
15th

* Leap year → (अधिवर्ष)

↓

Given year → दिया गया साल

↓

÷ 4

↓

If Remainder (शेषफल)

↓

0

↓

Then It's Leap year. ✓

* If Remainder - (शेषफल)

↓

is not 0 - (0 नहीं है)

↓

Then Its General Year OR Normal Year → {सामान्य वर्ष होगा}

Eg:-

2013 → General Normal सामान्य वर्ष

Leap year OR NOT ?

$4\overline{)2013}$

$R = 0$ ✗

∴ Leap year ✗

2018

Leap year OR NOT ?

$4\overline{)2018}$

$R = 0$ ✗

Leap year ✗

2024

Leap year OR NOT ?

$4\overline{)2024}$

$R = 0$ ✓

∴ Leap ✓

Century → {शतादी} → Normal century year
                  → Leap century year

Leap → ?

given century

÷ 400

शेषफल

if Remainder → is / not → zero → Then → Not leap century ✗

zero

Then ✓ Leap century ✓

Year → ÷ 4

century → ÷ 400

Yea Leap → ÷ 4

cent leap → ÷ 400

$\frac{2024}{4} \Rightarrow R = 0$ ✓

* Centuary year [शताब्दी वर्ष] → 400 से divide ✓

↓ like

{ 1600, 1800, 2000, 3000 ... } → Last में zero-zero ✓

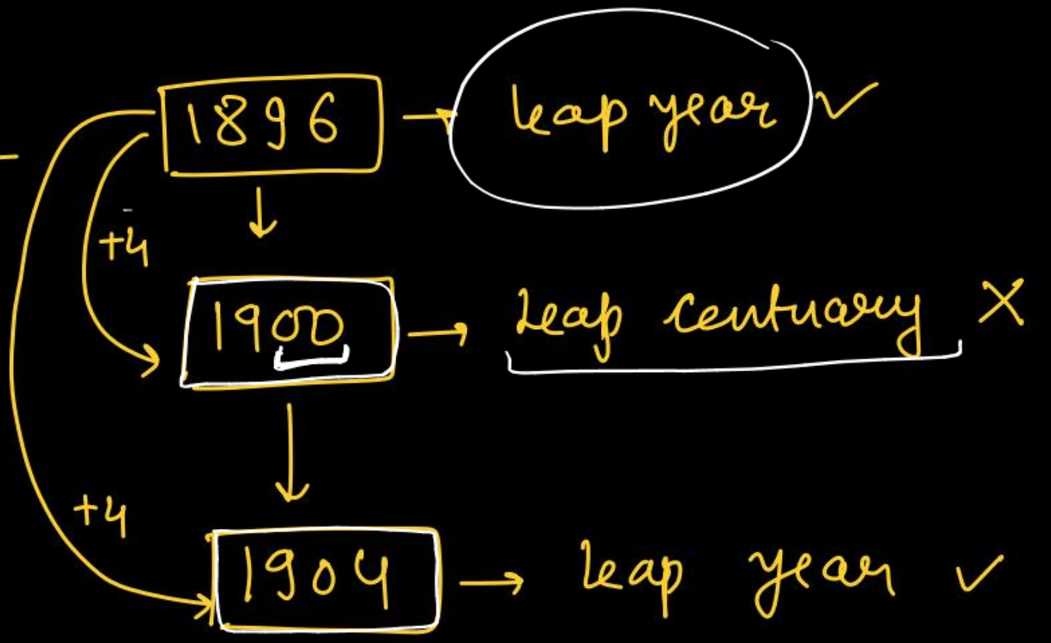
Eg:- Is 3000 leap centuary or not ✓ ?
क्या 3000 लीप शताब्दी है या नहीं ✓ ?

400) 3000

R = 0 ✓ → leap ✓

Imp.

Note :-



i.e. Leap year will come → After 8 years

* Imp. ☆

Leap year के बीच में Maximum कितने years का Gap हो सकता है

⇓

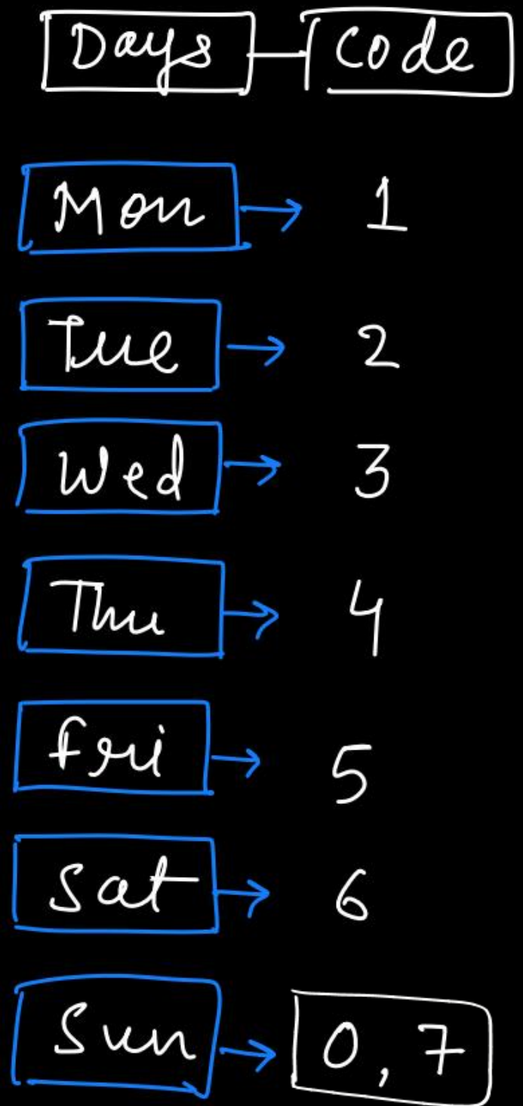
8 years.

☆

Century

2000

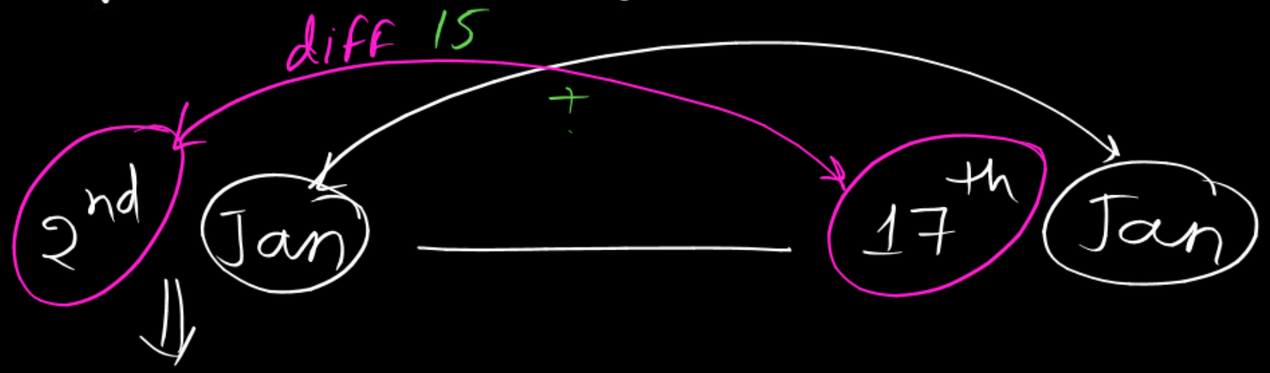
1901 X
1902 X
1903 X


Days
Code
Mon
1
Tue
2
Wed
3
Thu
4
Fri
5
Sat
6
Sun
0, 7

Type 1 → When Month → Same [जब एक ही माह की बात हो]

Q^n ① अगर 2 January को Saturday है तो 17 January को कौन सा दिन होगा ?

If 2nd January is Saturday then find the day of 17th Jan ?

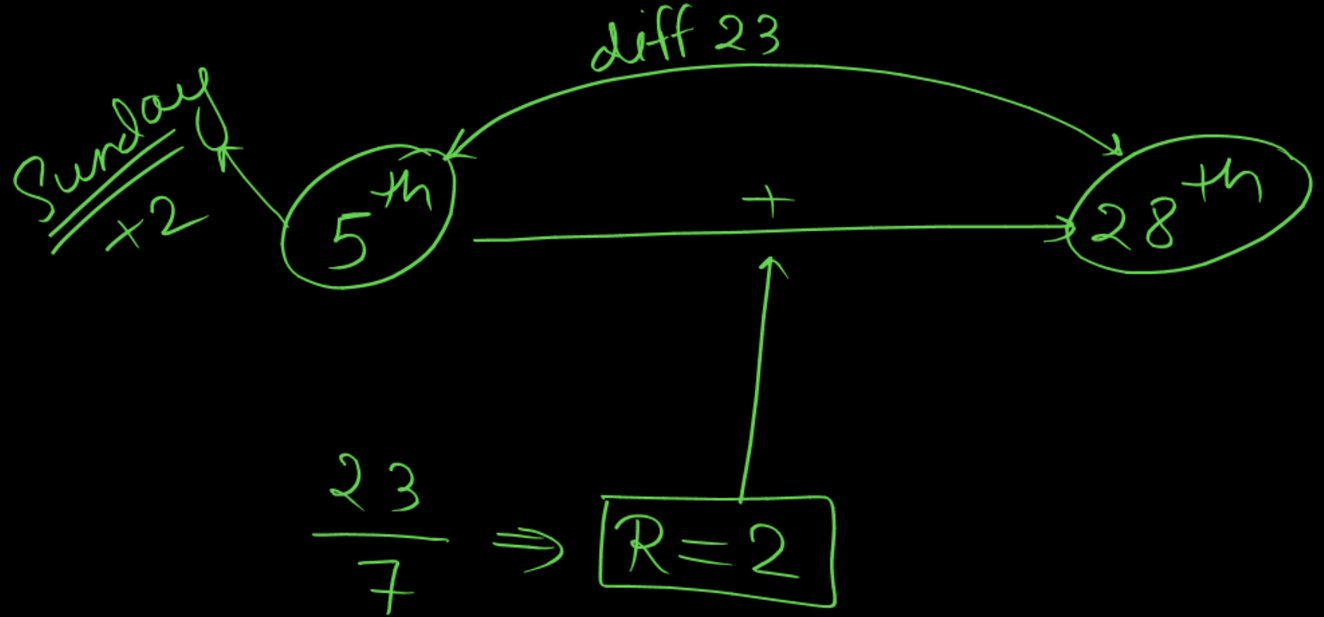


$\frac{15}{7} \Rightarrow R = 1$ (शेष)

Saturday + 1 ⇒ Sunday Ans

$$7\overline{)15}\ (2,\ -14,\ 1 = R)$$

Qn ② अगर 5 मार्च को रविवार है तो 28 मार्च को कौन सा दिन होगा ?
If 5th March is Sunday, Then find the day of 28th March ?



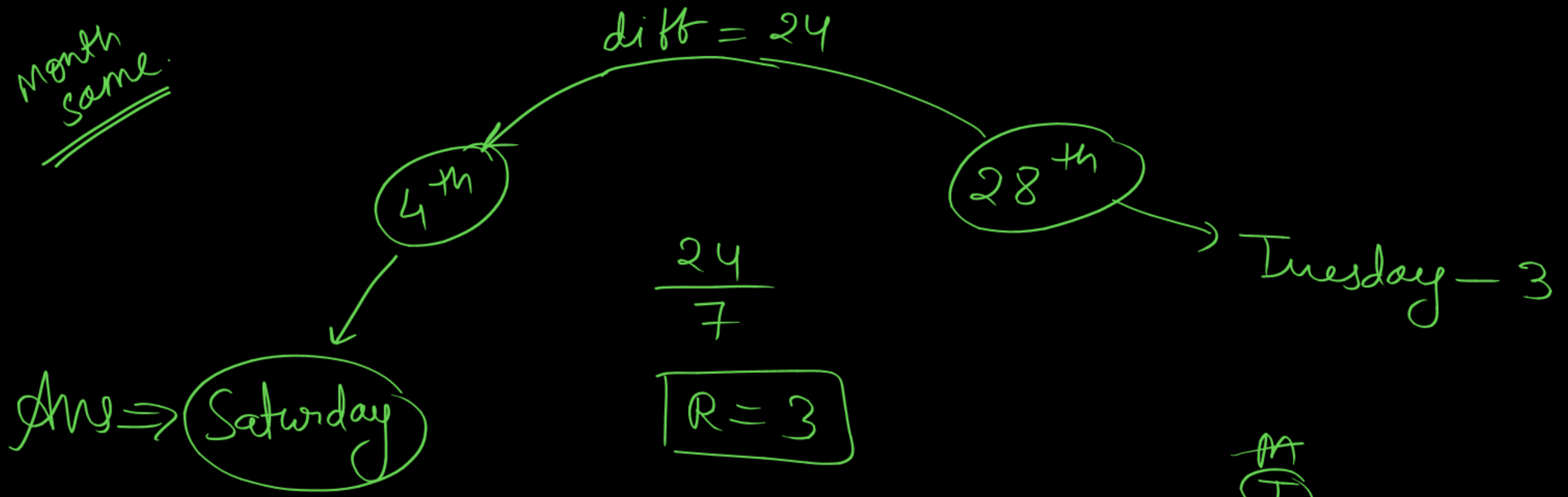
$\frac{23}{7} \Rightarrow \boxed{R=2}$

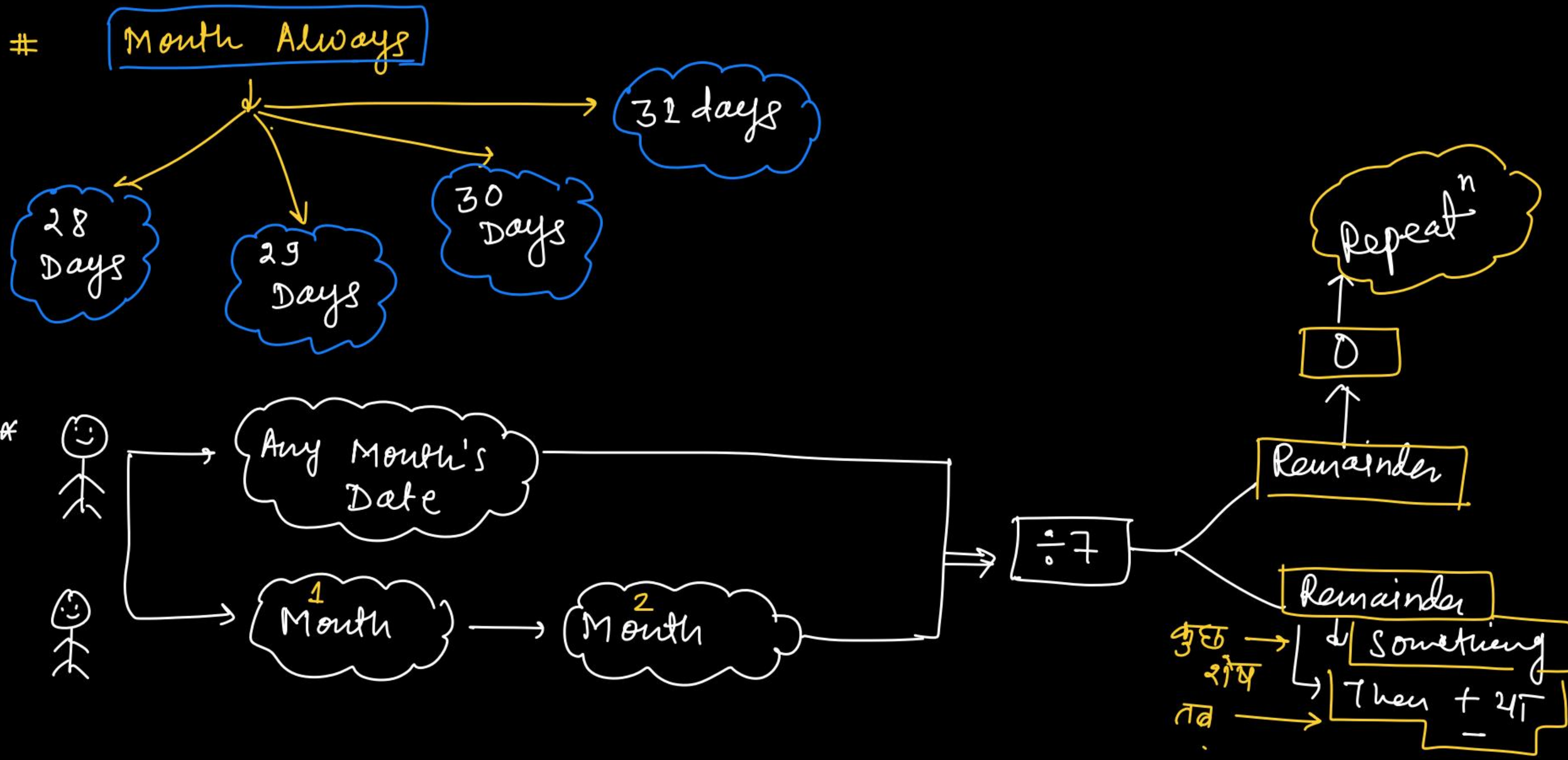
Ans Tuesday
(मंगलवार)

Qn ③ अगर 28 मार्च को मंगलवार है। तो 4 मार्च को कौन सा दिन होगा ?

If 28 March is Tuesday then find 4th March day ?

Month same.




Month Always
31 days
28 Days
29 Days
30 Days
Any Month's Date
1 Month
2 Month
÷7
Remainder
0
Repeat^n
Remainder
Something
Then + 2nd
कुछ शेष
तब

TYPE - 2 :- जब अलग - अलग माह की बात हो :-
[When the months are different]

Q^n (4) यदि 5 जनवरी को Sunday है तो 15 feb को कौन सा दिन = ?
If 5th Jan is Sunday then 15th feb Day will be ?

5th Jan

↓

Total = 31 days
- 5
Jan ⇒ 26 days

Feb ⇒ 15

Jan → 26/7 + 15/7

R = 5 + R = 11

Total R = 6

Sunday + 6

⇓

Ans Saturday

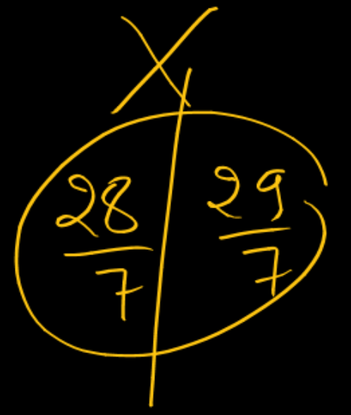
qn ① यदि 16 Jan को Sunday है तो 15 August को कौन सा दिन = ?

If 16th Jan is Sunday, then 15th August Day will be ?

16th Jan

31 days
-16
Remain (15) → days

Ans D.I.
Data Insufficient



Jan + feb + 31/7 + 30/7 + 31/7 - 15/7

Type ③ :- जब **1 year** दिया हुआ हो
[When 1 year is given]

Q^n ⑥ 16 Jan **2011** को रविवार है तो (15) August को कौन सा दिन होगा
If 16 January 2011 is Sunday, Then 15th August Day will be ?

Jan → 31 days
−16
Remain → 15 days

$$J + F + M + A + M + J + J + \frac{15}{7}$$

$$\frac{15}{7} + \frac{28}{7} + \frac{31}{7} + \frac{30}{7} + \frac{31}{7} + \frac{30}{7} + \frac{31}{7} + \frac{15}{7}$$

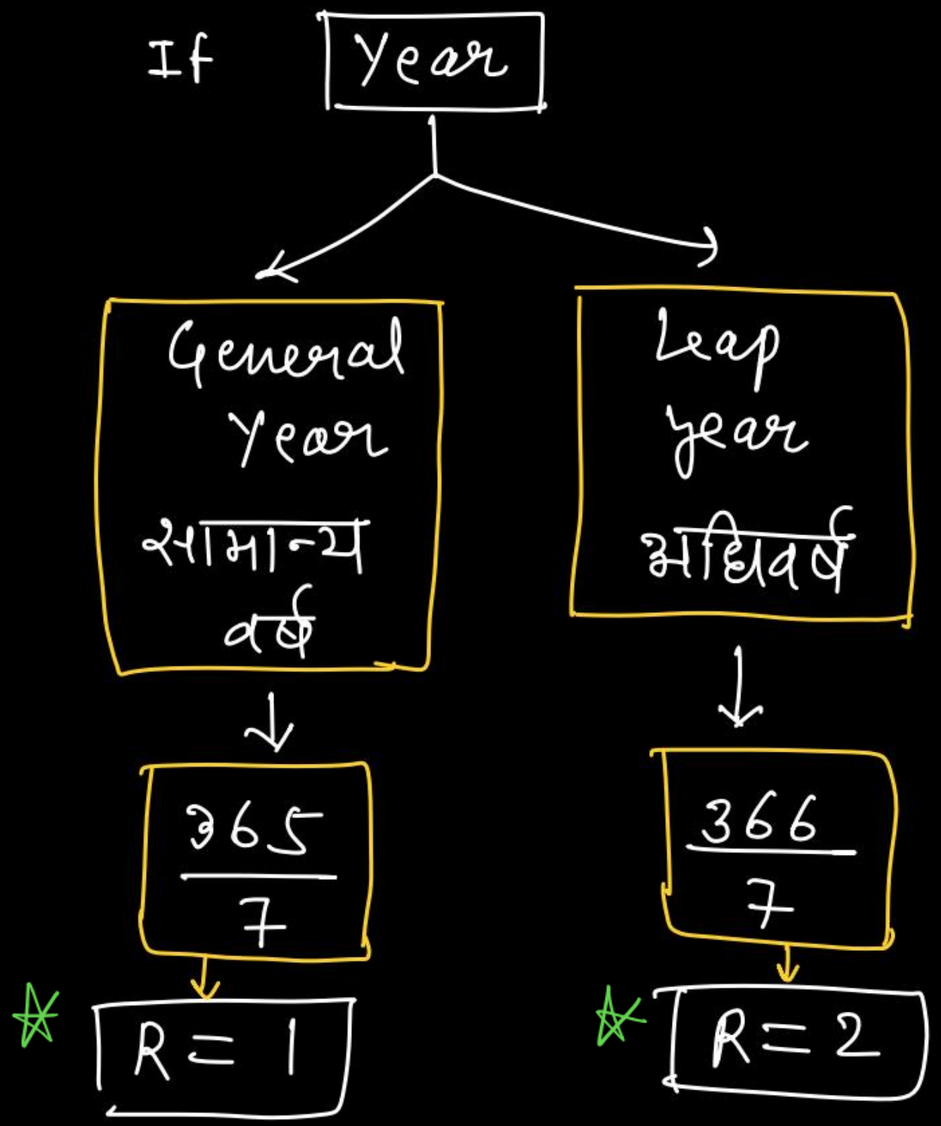
शेषफल ⇒ (Remainder)

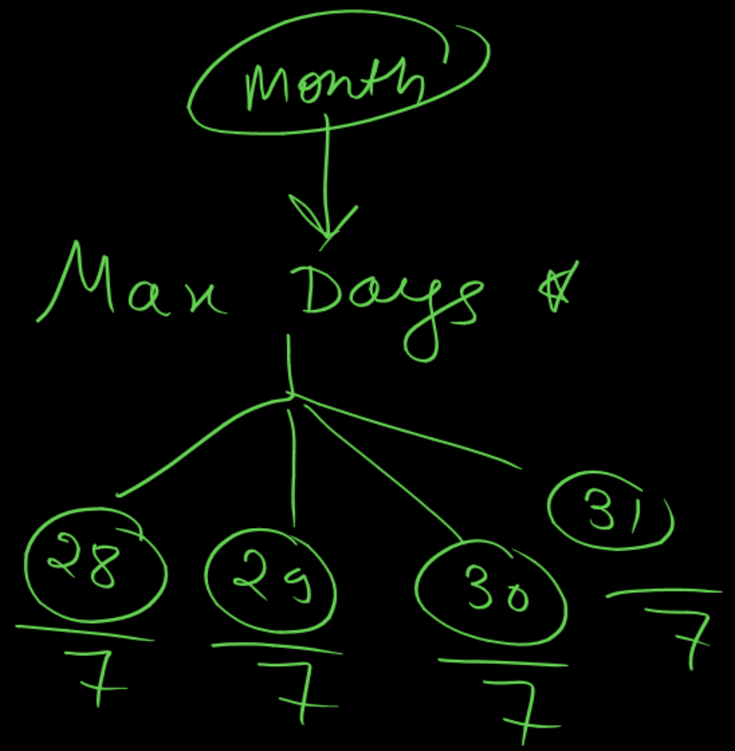
$$(1) + 0 + \cancel{3} + \cancel{2} + \cancel{3} + \cancel{2} + \cancel{3} + \cancel{1}$$

8 ⇒ 7 + 1

Given day = Sunday + 1 ⇒ Monday Ans

Note :-


If
Year
General Year
सामान्य वर्ष
Leap year
अधिवर्ष
365
7
366
7
R = 1
R = 2


Month
Max Days
28
29
30
31
7
7
7
7

Type - 4 → जब 1 से ज्यादा year का Data दिया गया हो :-
[When more than 1 year Data is given]

Q^{n} ⑦ अगर 10 जनवरी 2010 शनिवार है। तो 15 मार्च 2015 कौन सा दिन =?

If 10 January is Saturday. Then 15 March 2015 Day will be ?

Leap

2010 X ⇒ 365 days

2011 X ⇒ 365

2012 ✓ ⇒ 366

2013 X ⇒ 365

2014 X ⇒ 365

2015 X ⇒ ~~365~~

↳ [Jan + feb + 15 March]

Jan

365
-10
355
÷7

$$\frac{355}{7} + \frac{365}{7} + \frac{366}{7} + \frac{365}{7} + \frac{365}{7} + \frac{31}{7} + \frac{28}{7} + \frac{15}{7}$$

$$5 + 1 + 2 + 1 + 1 + 3 + 0 + 1$$

(5 and 2 marked X)

⇒ R = 0

Saturday + 0 ⇒ Saturday Ans

H.W. Questions.

Q^n ① यदि 5 मई को शनिवार है तो 17 नवम्बर को कौन सा दिन = ?
If 5 May is Saturday then 17 NOV. Day will be ?

Q^n ② यदि 17 May को शनिवार है तो 17 नवंबर को कौन सा दिन = ?
If 17^th May is Saturday then find 17^th NOV Day ?

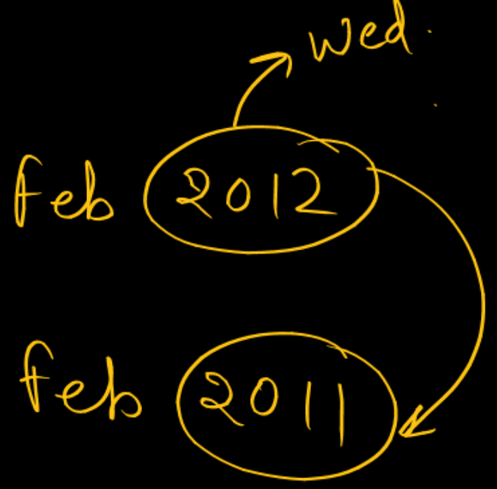
Q^n ③ यदि 1 October को Sunday हो तो 1 November को कौन सा दिन होगा ?
If 1^st October is Sunday then find 1^st November day ?

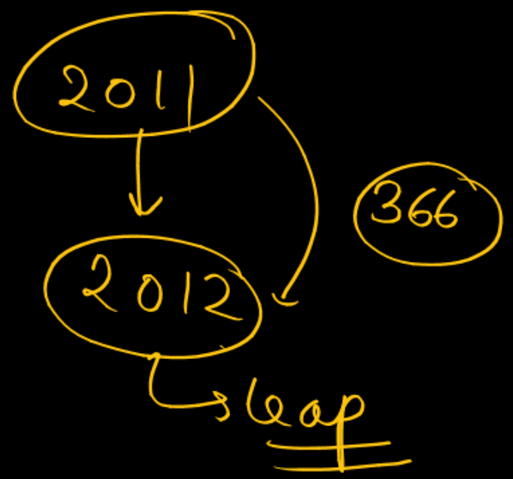
Q^n ④ यदि 1 July 1970 $\xrightarrow{\text{was}}$ Friday
then 1 July 1977 → ?

Some Practice Questions :-

Qn ① यदि फरवरी 2012 का अंतिम दिन बुधवार था तो फरवरी 2011 का अंतिम दिन = ?

If Last day of Feb 2012 was Wednesday then find the last day of Feb 2011 ?





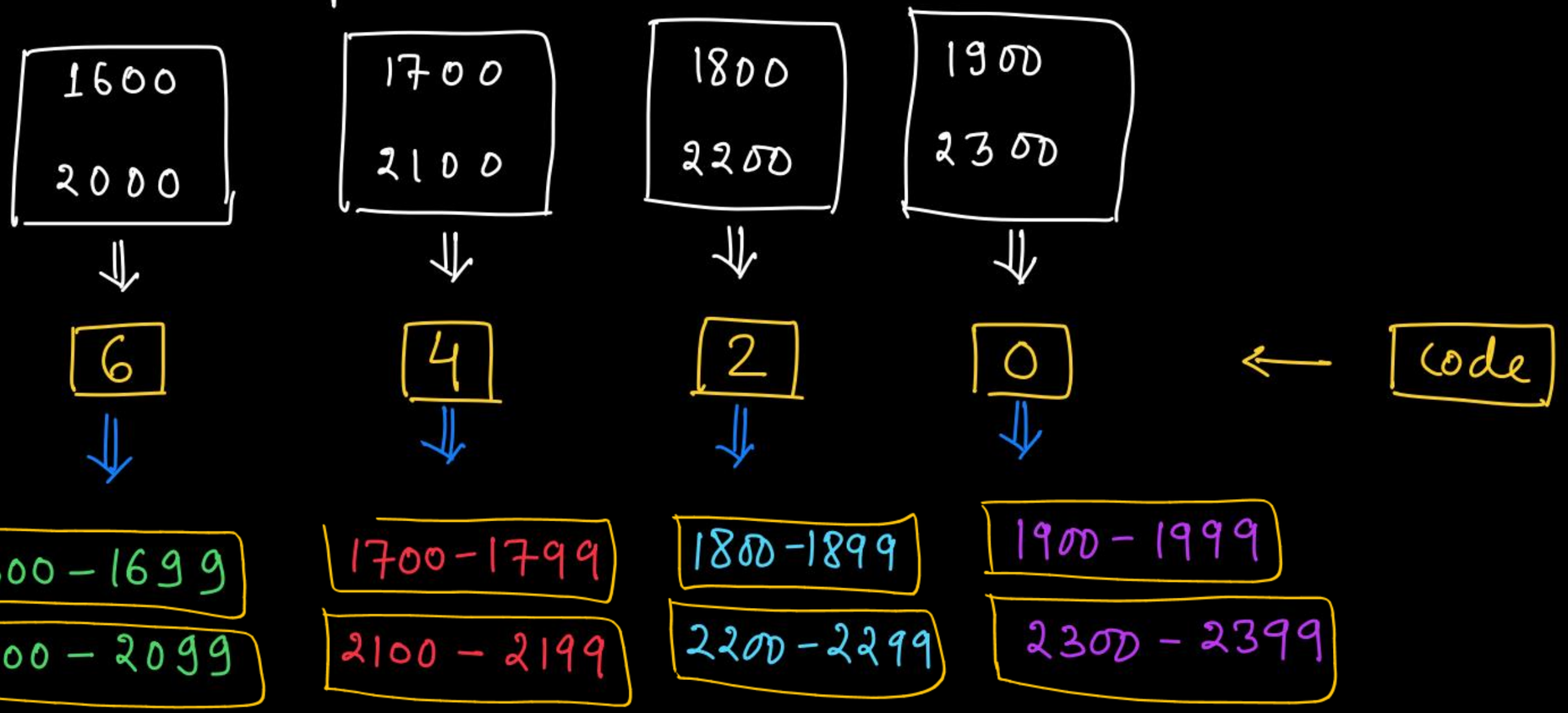
$\frac{366}{7}$

R=2

Wed - 2 = Monday Ans

TYPE-5

* For Centuary Code :-



Note :- For Month Code :- [General Year / सामान्य वर्ष]

365 days

Jan ⟶ 0

Feb ⟶ 3

March ⟶ 3

April ⟶ 6

May ⟶ 1

June ⟶ 4

July ⟶ 6

Aug ⟶ 2

sept ⟶ 5

oct ⟶ 0

Nov ⟶ 3

Dec ⟶ 5

Note:- For Leap year → Month Code

Jan → 6

Feb → 2

Note:- Rest of all the month's code will be same.

बाकी सारे महीने के कोड वही रहेंगे जो एक सामान्य वर्ष में थे।

Trick

Formula :-

Date +	Month code +	Year Last के 2 digit +	Year ÷ 4 and write whole value +	Century code
(दिनांक)	(माह कोड)	साल के आखिरी के 2 अंक बस	i.e. (पूर्णांक संख्या)	(शताब्दी कोड)

7

Qn (1) 10 जुलाई 2019 को कौन सा दिन था ?

Which was the day of 10th July 2019 ?

$$\Rightarrow \frac{10 + 6 + 19 + (4 + 6)}{7} \Rightarrow \frac{10}{7} \Rightarrow R = 3$$

1
9
10
+ 6
35

Ans 10th July 2019 ⇒ Wed.

Day code

Mon → 1
Tue → 2
Wed → 3
Thu → 4
Fri → 5
Sat → 6
Sun → 0,7

H.W.

Q① 15th August 1947 को कौन सा दिन था ?

Imp → was which day ?

Q② 10 January 1920 को कौन सा दिन था ?

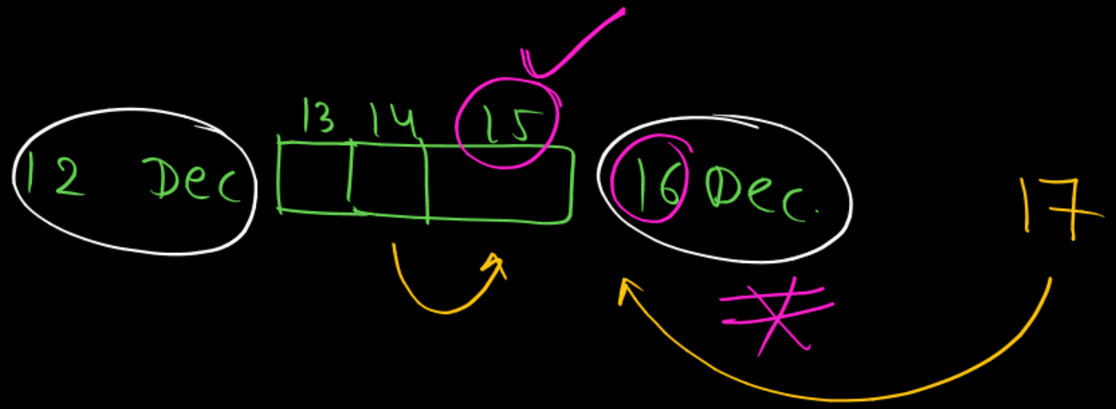
Imp → was which day ?

Type - 6

Q^{n} kamala remember that, her sisters birthday held b/w 12 Dec to 16 Dec. While Umesh remember that birthday was after 14 Dec and before 17 Dec. So find the exact birth day of kamal's sis ?

कमला को याद है कि उसकी बहन का जन्मदिन 12 Dec और 16 Dec. के बीच है। जबकि उमेश को याद है कि जन्मदिन 14 Dec के बाद और 17 Dec. के पहले है। तो कमला की बहन का जन्मदिन किस दिन है ?

Kamala →



Umesh ⇒

Ans ⇒ 15 Dec

* **TYPE-7**

Q. If a day before yesterday was Thursday. Then find when will be Sunday?

यदि बीते परसों गुरुवार था तो रविवार कब होगा ?

Thus	Fri	Sat	Sunday
Day	Yes.	Today	→ Tomorrow ✓ Ans
बीता परसो	बीता कल		

HoWo

Qu यदि परसों मंगलवार था तो अगले कल के ठीक बाद कौन सा दिन = ?

If day before yesterday was Tuesday, Then what day will be immediately after tomorrow ?

Last Imp.

Calender Repeat

↓

Normal Year → सामान्यवर्ष (365 days)

↓

3 case में Repeat

↓

+6 yrs. ✓

+11 yrs. ✓

+12 yrs. ☆

* Normal year → +6 yrs. [Repeat] ✓

* But Normal year →(+) Leap year है { i.e. Normal year के तुरंत बाद अगर Leap yr. है तो 11 साल बाद calendar Repeat ✓ }
  → +11 yrs. बाद [Repeat] ✓

* Normal year →(+6 years) Leap year → then → +5 yrs. बाद [Repeat] ✓
  OR → Direct → +11 yrs. बाद → [Repeat] ✓

2023
+11
2034

2023 ⇒ ?
2024
2025
2026
+6

Eg:- When will repeat calender of 1901 ?
1901 का कैलेंडर कब Repeat होगा ?

1901
+6
1907

1901
1902 → leap ×
1903
1904 → leap year
1905
1906
1907

6+1 ⇒ 7

& 1901 ←6 yrs. gap→ 1907

* 6 + 1 leap year ⇒ 7

* & 7 या 7 का multiple means zero i.e. same thing repeat

Eg:- 1907 के बाद कब कैलेंडर Repeat होगा ?

After 1907, when will be the same calender ?

given → 1907 → 1908 Leap year.

* 1907 + 11 = 1918 → Repeat ✓

1907 = 1918

1907
1908 → 1 Leap
1909
1910
1911
1912 → 2nd Leap
1913
1914
1915
1916 → 3rd Leap
1917
1918

1907 — 1918
gap = 11

11 + 3 leap

14 ✓

7 का Multiple

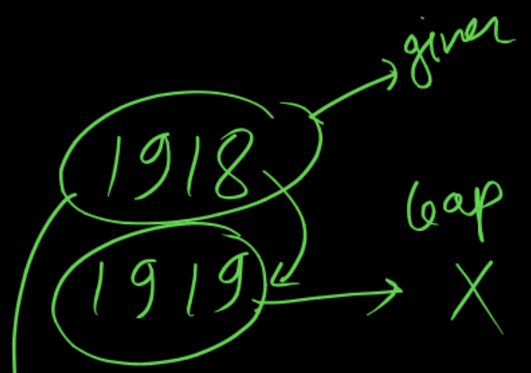
∴ Value Repeat ✓

Eg:- 1918 → के बाद कब कैलेंडर Repeat होगा

After 1918, when will calender Repeat ?

1918
+6
1924 → Leap year [Calender Repeat ✗]

∴ +5
1929 → Calender Repeat ✓

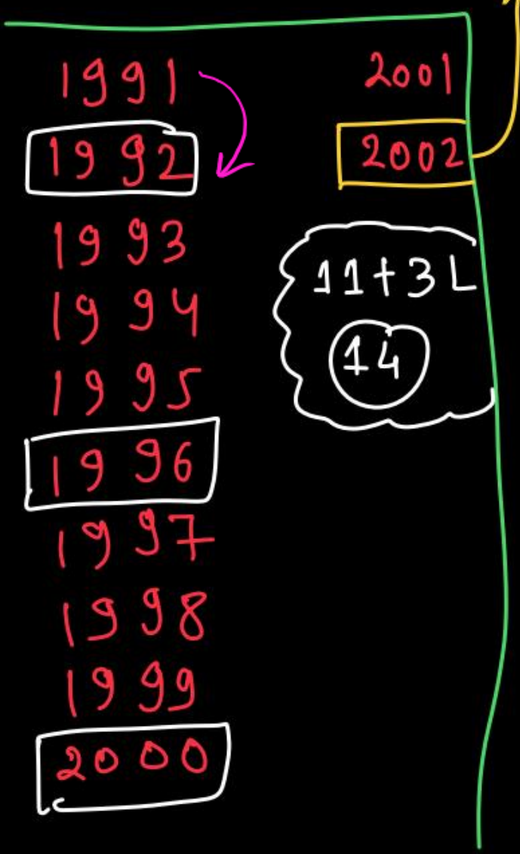


Calender Repeat - Normal year - [Special case]

1991
+11
2002 → Repeat

* But 1891 → (1892 → Leap.)
+11
Exception ⇒ 1902 → Repeat ✗

∴ 1891
12 साल ⇓
बाद 1903
⇓
Repeat ✓



* Reason :-
1891
1892 → Leap
1893
1894
1895
1896 → Leap
1897
1898
1899

1900 → Leap ✗
1901
1902

Total ⇒ 11 yrs + 2 Leap
+
13 yrs.

& we want 7 Multiple
∴ 13 + 1 = 14

Note :-

* 6 yrs → 1 leap year → 6+1 ⇒ 7

* 11 yrs → 3 leap year → 11+3 ⇒ 14

* 12 yrs → 2 leap year → 12+2 ⇒ 14

If there were non leap centuary year.

या

Normal centuary year हो तब.

Calender Repeat → Leap year Case

* Leap year Calender → Leap year में ही Repeat होगा
but in terms of 7 multiple i.e. 7 के गुणांक follow होना चाहिए

* Normal Leap year case → +28 years → Repeat ✓
(7 Leap year)

& 28+7 → 35 → 7 का Multiple (गुणांक)

2024 → Leap
+28
2052

* 28 years से पहले Leap year Repeat नहीं होगा Imp
Before 28 years → Leap year → Repeat ✗

Eg:- 2004 का कैलेंडर कब Repeat होगा ?
When will be repeat 2004 calender ?

Calender Repeat → Leap year [special case]

Non Leap year Century

Like

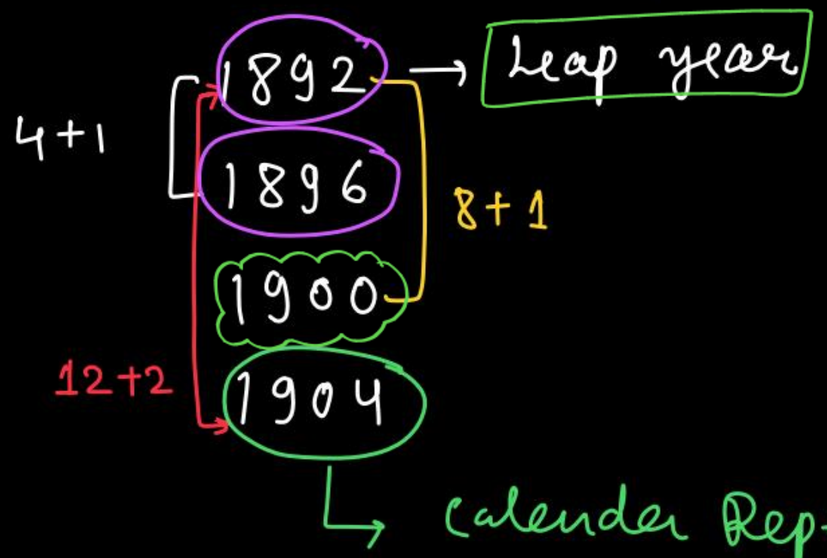
(1900, 1800, 1700)

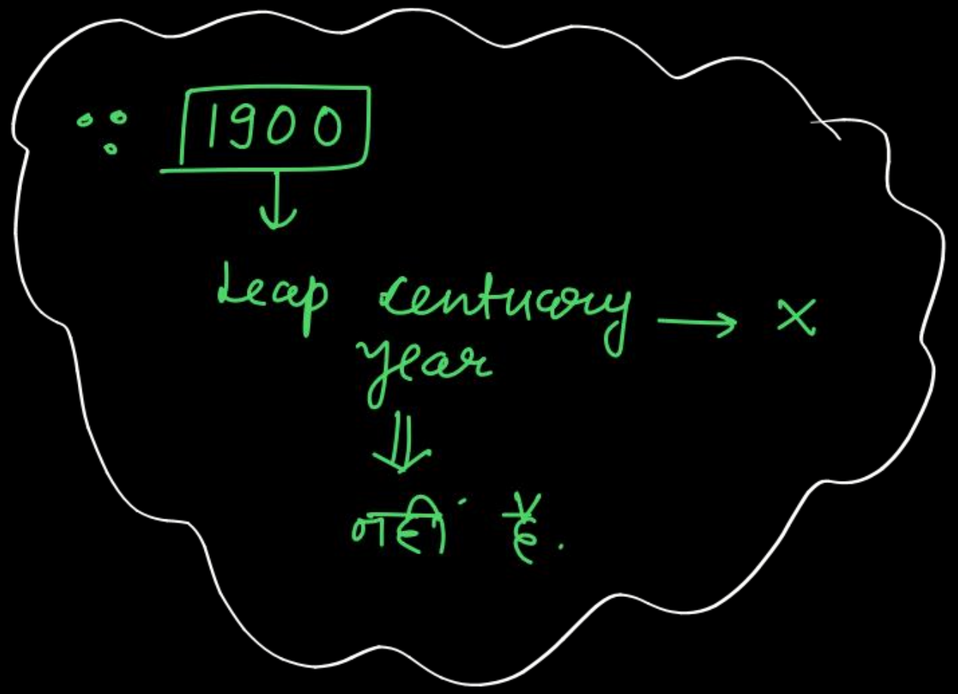
↓

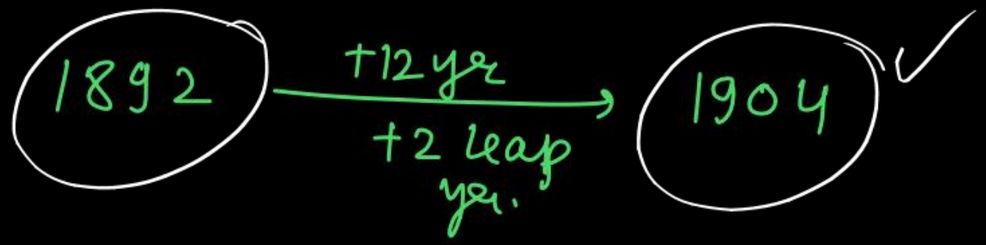
तब Leap year calender Repeat → +12 साल बाद
(After 12 yrs)

Eg:- 1892 → ? Repeat

[Leap Year Repeat Special Case]







12 + 2 ⇒ (14)
↳ Multiple of 7

Note

Exception

1888, 1884, 1880, 1876, 1872 → +40 yrs → Repeat ∿

Eg

1988
↓
Leap yr.
↓
Repeat
↓
+28 yrs. → 7 Leap yr.
↓
2016
↓
Repeat ∿

1888
↓
Leap yr.
↓
Repeat
↓
+40 yrs. → 9 Leap yr.
↓
1928
↓
Repeat

1950

$$\begin{array}{r} {\scriptstyle 1}\,{\scriptstyle 1} \\ 1888 \\ 40 \\ \hline 1928 \end{array}$$

Q① which year will have same calender as that of 2014 ?
किस वर्ष में 2014 के समान कैलेंडर होगा ?

Options

(A) 2020 ✓
(B) 2016
(C) 2021
(D) 2025

Given year

2014 → non-leap year (साधारण वर्ष)

+6

2020

2014

2015 → leap year ✗

H.W.

Qn (2) the calender for the year 2007 will be same for the year ?
वर्ष 2007 का कैलेंडर किस वर्ष के लिए समान होगा ?

Options

(A) 2014
(B) 2016
(C) 2018
(D) 2020

Telegram
⇓
CSAT By Ayushi ma'am

12PM to 3PM

HoWo

Qn (3) The calender of the year 2006 was used before in the year ?
वर्ष 2006 का कैलेंडर किस वर्ष में इससे पहले इस्तेमाल किया गया था ?

Options

(A) 1996
(B) 1995
(C) 2002
(D) 2000

HoW.

Qn (4) The calender for the year 2007 will be the same for the year ?

वर्ष 2004 का कैलेंडर किस वर्ष के लिए समान होगा ?

options

(A) 2014

(B) 2032

(C) 2038

(D) 2020

Home Work

Q5 The calender for the year 2007 will be the same for the year ?

वर्ष 1984 का कैलेंडर किस वर्ष के लिए समान होगा ?

options

(A) 2024

(B) 2012

(C) 2018

(D) 2020

H.W.

Qn ⑥ The calender for the year 1884 will be same for ?

वर्ष 1884 का कैलेंडर किस वर्ष के लिए समान होगा ?

H.W.

Q. (7) 1896 → when will be repeat ?
↳ का कैलेंडर कब Repeat होगा ?

options

(A) 1914
(B) 1908
(C) 2018
(D) 2020