

months & weeks

1 week = 7 days

1 year - 52 weeks + 1 odd day

52 weeks + 2 odd days (leap year)

Feb - 28 days

29 days (leap year)

months :-

[J	F	M	A	M	J	E	A	S	O	N	D]
[O	3	3]	[F	1	4]	[J	2	5]	[O	3	5]

weeks :-

S	M	T	W	Th	F	S
0	1	2	3	4	5	6

(Q) What was the day 30th Jan 1947?

Ans - \rightarrow last 2 digit of year $\rightarrow \underline{1947}$

\rightarrow divide that by 4 $\rightarrow \frac{47}{4} = 11$
 (q) \downarrow
There is
remainder

\rightarrow Take the date of the given

Year = 26

\rightarrow Take the code number of the month
from the previous page-

Jan no. it is $\rightarrow 0$

To do the sum of all

$$47 + 11 + 26 + 0 = 84$$

$$\begin{array}{r} 47 \\ 11 \\ 26 \\ \hline 84 \end{array}$$

divide this by 7 $\rightarrow 84 / 7 = 0$
 (R)

To 0 for the code of week it is
Sunday $\rightarrow 0$

2

1000 - 1000 -

$$1600 - 1699 - 6$$

$$1700 - 1799 - 4$$

$$1800 - 1899 - 2$$

$$1900 - 1999 - 0$$

$$2000 - 2099 - 6$$

$$3000 - 3999 - 4$$

Q → What day is 2003 by 13th.

$$\underline{2003}$$

$$\div \text{by } 4: \quad \frac{3}{4} = 0$$

$$\underline{13} \rightarrow \text{date}$$

$$\underline{11} \rightarrow \text{month}$$

2 → August → the year code 7 $\sqrt[7]{1822}$

$$3 + 0 + 13 + 2 + 6 - 1 \cancel{+} 24 \quad \frac{24}{4}$$

$$\underline{18} \rightarrow 4$$

$$7 \sqrt[7]{243}$$

$$\begin{array}{r} 21 \\ \hline 3 \\ \hline 2 \end{array}$$

(P) 29th Feb 2012.

$$2012 \rightarrow \frac{12}{4} = 3 \quad \text{PPF1 - 0001}$$

year code = 29

month code = 3

year code = 6

$$12 + 3 + 29 + 3 + 6 = \frac{53}{7} = 7 \quad \begin{matrix} 29 \\ 4 \\ \hline 5 \\ 6 \\ 7 \end{matrix}$$

(M) By 15th 1947

$$\frac{47}{4} = \frac{11}{2}$$

date 15th, month

month code = 6

$$47 + 15 + 6 = 68$$

$$\frac{47}{4} = \frac{11}{2}$$

$$\frac{47}{4} = \frac{11}{2}$$

$$\frac{15}{2}$$

$$\frac{0}{2}$$

$$16 - 16as - 6$$

$$17 - 17as - 4$$

$$18 - 18as - 2$$

$$19 - 19as - 0$$

$$20 - 20as - 6$$

(a) 29th Oct 2008 ✓

$$\frac{8}{4} = \underline{\underline{2}}$$

$$0 =$$

29

=

$$6 = \frac{45}{7} = \underline{\underline{3}}$$

$$\sqrt[7]{45} \underline{\underline{6}}$$

42

3

wednesday

S	F	M	A	N	J	J
033	614	625	635			

(a) 29th July 1976

$$\frac{76}{4} = \underline{\underline{19}}$$

$$\frac{76}{4} = \underline{\underline{19}}$$

$$6 =$$

29

0

$$= \frac{130}{7} = 4 \Rightarrow \frac{0}{130}$$

$$\sqrt[4]{1976} \underline{\underline{484}}$$

$$\begin{array}{r} 12 \\ 376 \\ -36 \\ \hline 16 \\ -16 \\ \hline 0 \end{array} \quad \begin{array}{r} 3 \\ 76 \\ -76 \\ \hline 19 \\ -19 \\ \hline 0 \end{array} \quad \begin{array}{r} 6 \\ 130 \\ -130 \\ \hline 0 \end{array}$$

wednesday

$$\begin{array}{r} 7 \\ 130 \\ -7 \\ \hline 60 \\ -56 \\ \hline 4 \end{array} \quad \begin{array}{r} 7 \\ 18 \\ -7 \\ \hline 11 \\ -7 \\ \hline 4 \end{array}$$

(i) what date of May 2002 did Monday fall
on Jan 4, 2016

(ii) Jan 4, 2016 falls on Monday
what day of the week Jan 4 2017 falls.

$$4 \sqrt{2027} \{56.$$

$$\begin{array}{r} 20 \\ -27 \\ \hline 24 \\ -24 \\ \hline 3 \end{array}$$

$$2027 =$$

$$\frac{27}{4} = 6$$

$$\begin{array}{r} 4 \\ = \\ 0 \\ = \\ 6 \end{array}$$

$$27 + 6 + 4 + 0 + 6$$

$$\frac{43}{7} = 1$$

Monday

(Q) 8th march was 2006 in wednesday

8th march 2005 on.

2006 - 1
2004 \rightarrow 2
~~tuesday~~ 2003 \rightarrow 1
2002 - 1

$$4 \sqrt{2006} \quad 51$$
$$\begin{array}{r} 20 \\ \hline 2006 \\ -20 \\ \hline 06 \\ -4 \\ \hline 2 \end{array}$$

(1) 8 march 2002.

\Rightarrow Friday

2005
5th Jan 2005
4 days after

(1) 6th march 2005 \rightarrow monday

6th march 2004 \rightarrow ?

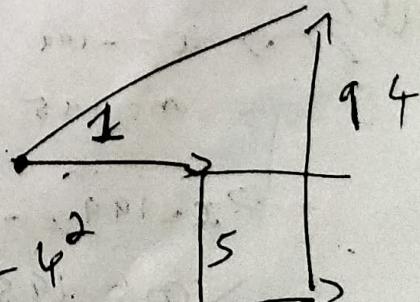
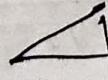
2004
8 28

2005 \rightarrow -1

2004 \rightarrow 2

\Rightarrow Monday

A
B
C



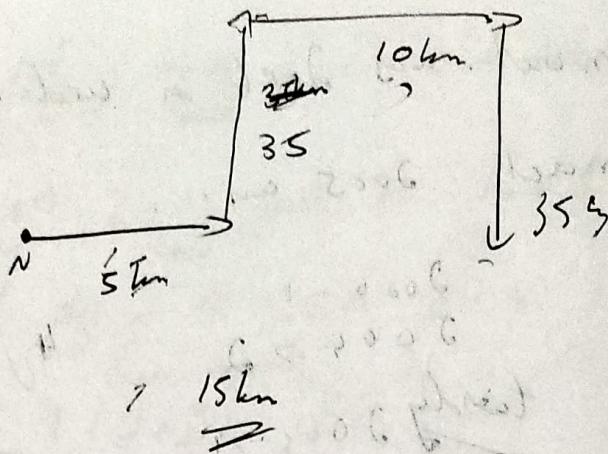
$$c^2 = 3^2 + 4^2$$
$$\Rightarrow 9 + 16$$

$$= 25$$

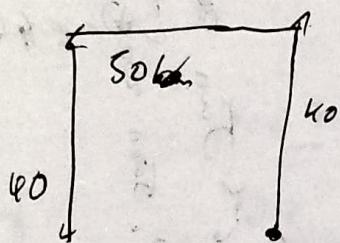
$$c = \sqrt{25} \quad \sqrt{4} \quad \sqrt{25}$$

5

(a)

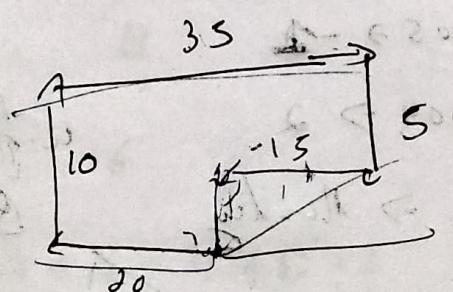


(a)



50 towards west

(b)



$$22 - 199$$

$$m = 195$$

$$15 \times \frac{100}{20} \alpha = 1 - 200$$

(b)

$$\Rightarrow x = -199$$

$$m = 195$$

$$\Rightarrow x - 199 = -199 - 195 = -395$$

$$200 = 200$$

$$m = 195 - 5 = 190$$

$$m = 195$$

\Rightarrow

{}

$$-199.$$

(A) 200, 195, ..., 105

$$AP; d = -5$$

$$n = \frac{(a-d)}{d} + 1 = \frac{200 - 105}{5} + 1 \\ = 20$$

$$\text{Sum} = \frac{n}{2} (a+ld) = \frac{20}{2} (200 + 105) \\ = 3050$$

initial value: $a = 200$

$$\text{Sum} = 1 - 3050 = -3049$$

$n > 100$

(5)

200 - 105

$$a = 200 \quad n = 20$$

$$l = 105$$

$$n = \frac{(a-l)}{d} + 1$$

$x-x-h$

$$\frac{200-195}{5} = 190-185-180-175 \dots \\ \dots -105 \quad n = \frac{200-105}{5} + 1 = \frac{95}{5} + 1$$

Sum of AP Series

(20)

$$\frac{n}{2} \times (a+l) \Rightarrow \frac{10}{2} (200 + 105)$$

$$\Rightarrow 10 \times 305$$

$$\Rightarrow 3050$$

3050

-3049

$$(P) \quad x = 0$$

$$y = 1$$

$$m = 0$$

$$\text{Part } (D)$$

$$\text{Part } (E)$$

a = 67
b = 68
c = 69
:
2 = 94

10-2

oc 8

$$\begin{array}{r} 67 \\ 27 \\ \hline 94 \end{array}$$

$$z = 0 + 1 = 1$$

$$0, 1, 1, 1$$

1

$$\Rightarrow m = 1$$

$$1 < 10-2 \Rightarrow \cancel{1} \cancel{2} 8$$

$$z = x + y \geq 1 + 1 = 2$$

map x, y with y, z

$$x =$$

A = 90
:
x = 115
x = 116
z = 116

$$\Rightarrow m < 10-2 \Rightarrow \cancel{0} \cancel{1} 8$$

$$z = x + y \Rightarrow \underline{0+1} = 1$$

map x, y with y, z

$$0, 1$$

$$1, 1$$

$$x = 1$$

$$y = 0$$

$$z = 1$$

$$x > y \quad y = 1 \quad z = 1$$

0

1

~~for ban accessori~~

$$115 > 115 \Rightarrow z = 1$$

fail

m++

0

~~for~~

$$\begin{array}{c} 0, 1, 1, 2, 3, 5, \\ 201-605 \end{array}$$

1.

$$X > Y$$

$$116 > 115$$

$$\checkmark$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

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$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$116 > 115$$

$$(Q) \quad x, y, z$$

$$(x = 3, y = 20) \stackrel{?}{=} (2 + 0) \times 3$$

$$\Rightarrow y > 0$$

$$y = 20 / 3 = 6 \frac{2}{3} = 30$$

$$x = x + 6 = 3 + 6 = 9$$

$$c = x + y = 3 + 20 = 23$$

$$9 + 30 = 39$$

$$lcm(6, 3) \Rightarrow 93 \geq 30$$

$\frac{3}{1}$

$$y \pmod 3 = 0 \quad 93/3 = 0$$

$\frac{1}{3}$

$$\text{while } x = 9$$

else:

$$\text{and } y = 30$$

$$c = c/5 \Rightarrow \frac{93}{5}$$

and

$$y = y_3 = \underline{\underline{30}}$$

$$x = \underline{\underline{9}} = 30 + 9 = 39$$

$$c = \underline{\underline{39}} \% 3 = -0$$

$$c = \underline{\underline{39}} / 6 = 7$$

$$39/3 = 10$$

$$m = 9 + 6 = 15$$

$$c = 25$$

$$y = \underline{\underline{40}} / 3 = 13$$

$$x = 15 + 6 = \underline{\underline{21}}$$

$$c = 24$$

$$3/3 = 1$$

$$x = \underline{\underline{27}} + 6 = 27 + 6$$

$$y = y_3 = 0$$

$$x = 27 + 6 = \underline{\underline{33}}$$

$$c = 33 + 0 = 33$$

$$33 > 30$$

$$\frac{33}{3} = 11$$

$$\underline{\underline{33}} / 3 = 11$$

$$c/5 = 6$$

$$c = 27 + 1 = 28$$

$$\underline{\underline{7}}$$

$(Q \rightarrow x = 10)$ 64, 32, 16, 8 4 2 1
 for $(x >= 10; x - \rightarrow)$ 10:
 if (z) $z = x \& (x >> 1);$ $\neg x = 10 \& x \rightarrow$
 and ("Y.d", 00);

$\frac{3}{\cancel{0}^{10}} \left\{ \begin{array}{l} (i) \cancel{x = 10} \rightarrow z \\ z = x = 10 \& (x >> 1) \end{array} \right.$ 64 32 16, 8 4 2 1
 $\frac{0}{\cancel{0}^{10}} \left\{ \begin{array}{l} (ii) \\ z = x = 9 \end{array} \right.$ $10 = 1010$
 $\frac{0101}{0000}$

$$q = 1001$$

$$\frac{0100}{0000}$$

$$(ii) z = x = 8$$

$$1000$$

$$0100$$

$$\frac{0000}{0000}$$

$$(iii) z = x = 7$$

$$0111$$

$$\frac{0011}{0011}$$

$$7$$

$$7$$

(Q) :- $\text{ans} = 0$

-- ans $\Rightarrow -1$

$\text{ans} (-1)$

$\text{ans} ++ \Rightarrow (0)$

$\Rightarrow --\text{ans} \Rightarrow -1$

\Rightarrow ~~despatch~~

\Rightarrow The program will run correctly.

(Q) :- $n = 10$

$s = 0$.

$w(n = 10)$

$s = s + 100$

~~so~~

\Rightarrow 600 runs at times

$$3 + 24 + 12$$

$$\begin{array}{r} 24 \\ 12 \\ \hline 36 \end{array}$$

$$\begin{array}{r} 24 \\ 72 \\ \hline 96 \end{array}$$

$$\begin{array}{r} 3 + 3 \\ \hline 6 \end{array}$$

(30)

(Q) :-

27 25

3. 3 + 2

3.

5.

5 75

108 Aug
300.

27

T.

47

108

(180)

18

-/- -/-

(P) $\frac{1}{2}$ $m=0$ to 14 to

$m=0$ to 14

12

14 - 5

16, 15

10

14

area loop

#

13

$m=5$

15,

14 - 5

9

$$15 \times 6 = 90$$

2

0 1 2 3 4 5 (6 7 8

3, 8, 7

9, 10, " 11, 12,

11,

13, 14)

(P).5 $x=4, y=3, z=$ 24 16 10 8 6 4 2 1

~~yf(x)~~

*

$x=4$

0, 0, 1, 0

$x=4$ & 6 10,

"

$x=4+1$

0, 0, 10 = 4, 0, 0, 11

0, 0, 0, 0 =

$x=5$

1100 \rightarrow
10

$x=5-3+1$

2 + 2
- 3

2 10

(P).6 $10^2 m$

0 + 0
- 0 0
2 + 2 8
0 2 11

$i=5$

1, 10

$k_m = 0$

5 10

(b) ~~m=0~~

$$m = 10$$

$$l = 6, m_m = 0$$

$i < m \Rightarrow$

$\Rightarrow 6 < 10$

$$\begin{array}{r} l \text{ surely } \mapsto 0 \quad 0+5=5 \\ \cancel{m_m=0} \end{array}$$

$$\begin{array}{r} m_m = 25 \\ l = 3+1 = 5+1 = 6 \\ l = 6 \quad \cancel{+1} = \end{array}$$

$$l = 6, m_m = 5$$

$i < m \Rightarrow 6 < 10 \Rightarrow$

$$\begin{array}{r} m_m + l = \\ 5+6 = 11 \\ m_m = 11 \end{array}$$

$$l = 7$$

$i < m \Rightarrow 7 < 10$

$$m_m + l = 11 + 7$$

$$m_m = 18$$

$$l = 8$$

$$18 - 1$$

$$m_m = 26 - 1$$

$$l = 9$$

$$\begin{array}{r} 35 \\ \cancel{l = 10} \end{array}$$

$$(P) : m = 35$$

$$i=0$$

$$m \% 10! = 0$$

$$35$$

$$m = m + 3.$$

$$35 + 3$$

$$\underline{\underline{m = 38}}$$

$$\rightarrow i=1$$

$$m \% 10! = 0$$

$$38 +$$

$$\underline{\underline{m = 41}}$$

$$i=2$$

$$41 \% 6.$$

$$41 + 3$$

$$44$$

$$\underline{i=3}$$

$$9 \cdot 5 = 4.$$

$$44 + 3' = 9$$

$$47$$

$$m = 50$$

$$+ 3 = 9 \cdot 5$$

$$\underline{\underline{50}} \rightarrow i=6$$

$$0! = 0$$

$$(Q) \Rightarrow m = 26 : 2$$

$$i=0$$

$$m \% 0! = 0$$

$$m = m + 5$$

$$26 + 5$$

$$m = 31 \\ i=1$$

$$\begin{matrix} > \\ i=1 \end{matrix}$$

$$31 + 5$$

$$\begin{matrix} > \\ i=2 \end{matrix}$$

$$- 36 \% 8.$$

$$36 + 5$$

$$41$$

$$\begin{matrix} i=3 \\ 41 + 5 \end{matrix} \rightarrow \begin{matrix} 46 \\ i=4 \end{matrix}$$

$$4,645$$

$$51$$

$$i=6$$

$$m = 56$$

$$262$$

$$2$$

$$(P) : m = 35$$

$$i=0$$

$$m \times 10! = 0$$

35

$$m = n + 3.$$

$$35 + 3$$

$$\underline{\underline{m = 38}}$$

$$\rightarrow i=1$$

$$m \times 10! = 0$$

$$38 +$$

$$\underline{\underline{m = 41}}$$

$$i=2$$

$$41 \times 16 \cdot$$

$$41 + 3$$

$$44$$

$$\underline{i=3}$$

$$44 + 3' = 9$$

$$47$$

$$m = 50$$

$$\underline{+ 3} = 10$$

$$\underline{\underline{50 \rightarrow i=6}}$$

$$0! = 0$$

$$(Q) \Rightarrow m = 26 \therefore$$

$$i=0$$

$$m \times 0! = 0$$

$$m = n + 5$$

$$26 + 5$$

$$m = 31 \quad i=1$$

$$\underline{\underline{i=1}}$$

$$31 + 5$$

$$\cancel{36} \quad \cancel{i=2}$$

$$- 36 \times 8 \therefore$$

$$m = 56$$

$$36 + 5$$

$$41$$

$$\underline{i=3 \quad 41 + 5 \rightarrow 6 + 6 \quad i=4}$$

$$46 + 5$$

$$51$$

$$i=6$$

$$m = 56$$

$$262$$

$$2$$

$$(P) : - a = 5 \& b = 5$$

$$\Rightarrow b! = 0$$

$$5 * (5, 4)$$

$$5 * (5, 3)$$

$$5 * (5, 2)$$

$$5 * (5, 0)$$

$$5 * (5, 0) \quad | \quad 0 >$$

$$\text{if octave} = 1$$

$$\text{then answer} = \underline{\underline{3125}}$$

(Q) :-

$$(cf) a = 5, b = 2$$

$$\cancel{f + s + x}$$

$$\Rightarrow 102 + 115 + 120 = 337$$

$$a = 17 \quad A = 60$$

$$b = 120 \quad Z = 90$$

$$0 = 48 \quad q = 37$$

$$\text{"space} = 32$$

(P) $\Rightarrow \text{arr}[i] = ?_{2, 3, 4, 5}$

$m=4$

$i=0 \rightarrow m=4$

$\text{arr}[i] = \text{arr}[i] + \text{arr}[i+1]$

$$i = \cancel{1} \quad \underline{2} \quad \underline{3} \quad \underline{4} \quad \underline{5}$$

$\text{arr}[i] = ?_{1, 2, 3, 4, 5} \quad 6, 7$

$i=1$
 $\Rightarrow \text{arr}[i]$

~~1~~

$\text{arr}[i] \Rightarrow 2 + \cancel{3}$

$$\begin{matrix} 5 \\ 3, 5, \cancel{3}, 4, 5 \end{matrix}$$

$i=2$
 $\cancel{3} + 4$

$$\begin{matrix} 3, 5, \cancel{3}, \cancel{4}, \cancel{5} \\ 3, 5, 2 \end{matrix}$$

$i=3$
 $7 + 4$

$$3, 5, 2, \cancel{7} =$$

$i=4$

$5 +$

$5 + \cancel{0}$

$\text{arr} \Rightarrow \cancel{\text{arr}}$

(P)
 \Rightarrow

$i=5, \text{met.}$

$5 - 1, 6$

$m=2$
 \Rightarrow

$5, 6$

$3,$

(Q) :-

$$f_1 = 1 \quad f_2$$

for (k=2, h cm, h+1)

$$F = F_1 + F_2 \Rightarrow 2$$

$$F_2 = 2$$

$$F_1 = F \pm 1$$

$$\Rightarrow k=3;$$

$$m=5$$

$$F = F_1 + F_2$$

$$F_2 = 1 + 1$$

$$F_1 = 2$$

$$\Rightarrow k=4$$

$$F = F_1 + F_2$$

$$F = 1 + 1$$

$$m=5$$

$$d_1 = d_2 = 1$$

$$k=2 \quad 1$$

$$F = F_1 + F_2 = 1 + 1 = 2$$

$$\frac{F=2}{2} \neq f_1 \quad F=2$$

$$F_1 = 2, \quad F_2 = 1 \quad / F_1 = 2$$

$k \neq 3$

$$F = F_1 + F_2 \Rightarrow 2 + 1 = 3$$

$$F = 3.$$

$$k=4$$

$$F_2 = 2$$

$$F = F_1 + F_2$$

$$F_1 = 3$$

$$3 + 2$$

$$F = 5$$

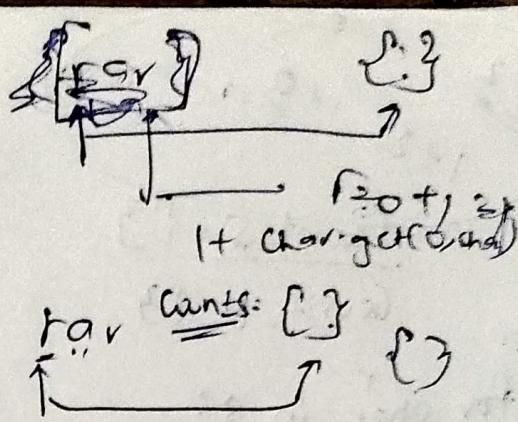
$$F_2 = 3$$

$$F = 5$$

$m = 2, c = 1$

$m, a, b, \text{ limit} = 10;$
while ($c < \text{limit}$).
 $i < 10$ if

~~$m = 2$~~



(1) $\text{if } l - (a > b \& \& a > c) ? a : (b > c) \& \& (b > c) ? b : c$, \rightarrow this is for 3 variables

~~$(c > a) \& \& (b > c) \& \& d > b$~~ ?

~~$((c > a) \& \& (b > b) \& \& (d > b)) ? c : d$~~

~~$(\cancel{a} (c > a) \& \& ($~~

~~$(a > b) \& \& (a > c) \& \& (a > d) ? a :$~~

~~$(b > a) \& \& (b > c) \& \& (b > d) ? b : d$~~

~~$l = [1, 2, 3, 4]$~~

~~for $i = 0$ to $l - 1$~~

~~for i in range($len(\text{arr}) - 1$)~~

~~if $\text{arr}[i] + \text{arr}[i+1] = \text{tar}$
return $\text{arr}[i], \text{arr}[i+1]$~~

Count-

12. ~~1+2 = 0~~ ~~char~~
1+2 = 0 ~~char~~

int Count-S = {}

s = str
Count-t = 83

for char in s:

Count-S[char] += 1

error

{
p : 1
q : 2
q : 3
}

{ key : value }

rar [1 : 2]
a [1 : 1]

tarr [a : 1, r : 2]

Count-S[char] = 1 + Count-S.get(0, ~~char~~ char)
if char in rar[r]

(a)

(r) 1 ≠

rch cat-S == Cr-t

{} {} {}

char - S

{
t : 1 + o = 1 + 1 = 2
a : 1 + o = 1 + 1 = 2

Synopsis - Interg.

- (a) No animals from land are wholly adapted
completely annihilated
n. destroyed
- (b) check spelling
- (c) They were
- (d) today words
- (e) I mean now in more mould, self implies
by others ... from them
n. known
- I think is place
- (f) I cannot conceive of a ten day law without some
kind of
3. longer
broadening
- (g) If so and the same type of law when we could have
b) polish
- (h) I cannot conceive of a law when I
was in the refrigerator
- (i) image
- (j) Much can be done, horses etc can
3. eat immediately
- (k) nicely series in
(l) a nicely orderly area a border

Change of speech :-

- (1) His father ordered him to go to his room & study
 to - his father said to him " Go and study in your room "
- (2) The boy said " who dare tell you a lie "
 Mr. - the boy replied who dared tell him a lie
 =

Change of voice :-

- (1) you need to clean your shoes properly
 to - your shoes need to cleaned properly

Verb tense formation :-

- (1) (1) at (2) if 3. take (4) once (5) may
 (2) 3 2 5 1 4

Negative construction :-

- (1) Most of the other colors are as healthy as, if not healthier than pink colors
 (2) We won't regret

Negative emphasis :-

- (1) We found a wooden broken chair in the room
 (2) broken wooden chair

Negative completion :-

- (1) his behavior is so unpredictable that he -
 (2) is seldom trusted by others
 spotting errors

- (1) sped the car

- (2) is not attesting his office