## PUZZLE

Logical Reasoning Puzzles require you to analyze the given data, arrange everything the given order and mark correct answer accordingly.

## Floor Puzzle

In this section, information of people living on different floor of the same or different building will be given. You need to arrange them according to the given information.

Direction: Study the following information carefully and answer the given question.
Eight friends Ankit, Abhi, Akshay, Arjun, Arav, Anmol, Ankush and Atul live on different floors of an eight floors building, Ground floor is numbered as 1 and the topmost floor is numbered as 8 . One person lives on each floor but not necessarily in the same order.

Atul lives on an odd-numbered floor but not on the bottom floor. Two friends live between Atul and Ankit. Ankit lives above the floor on which Atul lives. Three friends live between Akshay and Arjun. Arjun lives on an even-numbered floor. Arav lives just below Arjun. Arav lives one of the floors above Abhi. Ankush lives above Anmol but below Abhi.
Q. The number of floors above Ankit is same as the number of floors below $\qquad$ ?
A. 1) Atul lives on an odd-numbered floor but not on the bottom floor.
2) Two friends live between Atul and Ankit.
3) Ankit lives above the floor on which Atul lives.
4) Three friends live between Akshay and Arjun.
5) Arjun lives on an even-numbered floor.

|  | CASE 1 | CASE 2 |
| :---: | :---: | :---: |
| Floor | Person | Person |
| 8 | Arjun/ Akshay | Ankit |
| 7 |  |  |
| 6 | Ankit | Arjun/Akshay |
| 5 |  | Atul |
| 4 | Akshay/ Arjun |  |
| 3 | Atul |  |
| 2 |  | Akshay/Arjun |
| 1 |  |  |

6) Arav lives just below Arjun.
7) Arav lives one of the floors above Abhi. (This eliminates case 2)
8) Ankush lives above Anmol but below Abhi.

|  | CASE 1 | CASE 2 |
| :---: | :---: | :---: |
| Floor | Person | Person |
| 8 | Arjun | Ankit |
| 7 | Arav |  |
| 6 | Ankit | Akshay |
| 5 |  | Atul |
| 4 | Akshay |  |
| 3 | Atul |  |
| 2 |  | Arjun |
| 1 |  | Arav |

Clearly, there are two floors below the floor on which Atul lives.

| CASE 1 |  |
| :---: | :---: |
| Floor | Person |
| 8 | Arjun |
| 7 | Arav |
| 6 | Ankit |
| 5 | Abhi |
| 4 | Akshay |
| 3 | Atul |
| 2 | Ankush |
| 1 | Anmol |

## Memory Tip



A

- When $A$ is two places below $B$ :

| A |
| :---: |
|  |
|  |
| B |

- When two floors are there between $A$ and $B$ :


## Scheduling Puzzle

In this section, data based on months or days or years will be given.

## Month Based Puzzle

Direction: Read the following information carefully and answer the given questions.
Eight people A, B, C, D, E, F, G, and H are going to attend meetings in the eight different months viz. January, March, April, May, July, August, September and October but not necessarily in the same order. No one will attend the meeting after C. D attends the meeting in the month which has 30 days but before August. B attends the meeting in the month after F . H attends the meeting in the month before the person who attends the meeting in the July. Neither G nor $E$ attends the meeting in the month of July. B and F both attend the meeting in the months before May. E attends the meeting in the 3rd month after the month in which H attends.
Q. How many people will attend the meeting after A?
A. 1) $D$ attends the seminar on the month which has 30 days but in the month before August.
2) No one will attend the meeting after $C$.

Using statement 1, D will attend the meeting in the month of April because April is the only month that has 30 days before August month.
3) H attends in the month before in which the person who attends in the month of July.
4) E attends 2 nd month after the month in which H attends.

| Month | Person |
| :---: | :---: |
| January |  |
| March |  |
| April | D |
| May | H |
| July |  |
| August | E |
| September | C |
| October |  |

5) $B$ and $F$ both attend in the months before May.
6) $B$ attends in the month after $F$.

| Month | Person |
| :---: | :---: |
| January | F |
| March | B |
| April | D |
| May | H |
| July |  |
| August |  |


| September | E |
| :---: | :---: |
| October | C |

7) Neither G nor E attend in the month of July.

| Month | Person |  |  |
| :---: | :---: | :---: | :---: |
| January | F |  |  |
| March | B |  |  |
| April | D |  |  |
| May | H |  |  |
| July | A |  |  |
| August | G |  |  |
| September | E |  |  |
| October | C |  |  |
|  |  |  |  |

A attends in the month of July. So, three people will attend the meeting after A. Hence, the correct answer is Three.

## Common Mistake

The person born in January is the older than the person born in March or any month after

## January.

## Day Based Puzzle

Direction: Read the following information carefully and answer the questions that follow.
Pinku, Chintu, Mintu, Rinku, Pinki, Rinki and Cheeku are seven cousins who teach in the same institute. However, each of them teaches only one day in a week. No two per- sons teach on the same day.

Pinku teaches on Monday and Pinki teaches on Sunday. Chintu teaches four days after Pinku. Rinki teaches three days after Pinki. Neither Mintu nor Cheeku teaches on Saturday. Cheeku teaches on a day before Mintu.
Q. Who teaches on Saturday?
A. Seven persons: Pinku, Chintu, Mintu, Rinku, Pinki, Rinki and Cheeku.

Seven days: Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

1) Pinku teaches on Monday and Pinki teaches on Sunday.

| Day | Person |
| :---: | :---: |
| Sunday | Pinki |
| Monday | Pinku |
| Tuesday |  |
| Wednesday |  |
| Thursday |  |
| Friday |  |
| Saturday |  |

2) Chintu teaches four days after Pinku. (Thus, Chintu teaches on Friday)
3) Rinki teaches three days after Pinki. (Thus, Rinki teaches on Wednesday)

| Day | Person |
| :---: | :---: |
| Sunday | Pinki |
| Monday | Pinku |
| Tuesday |  |
| Wednesday | Rinki |
| Thursday |  |
| Friday | Chintu |
| Saturday |  |

4) Neither Mintu nor Cheeku teaches on Saturday.
(Thus, the remaining person Rinku teaches on Saturday)

| Day | Person |
| :---: | :---: |
| Sunday | Pinki |
| Monday | Pinku |
| Tuesday |  |
| Wednesday | Rinki |
| Thursday |  |
| Friday | Chintu |


| Saturday | Rinku |
| :--- | :--- |

5) Cheeku teaches on a day before Mintu.
(Thus, Cheeku teaches on Tuesday and Mintu teaches on Thursday)

| Day | Person |
| :---: | :---: |
| Sunday | Pinki |
| Monday | Pinku |
| Tuesday | Cheeku |
| Wednesday | Rinki |
| Thursday | Mintu |
| Friday | Chintu |
| Saturday | Rinku |

Hence, Rinku teaches on Saturday.

## Year Based Puzzle

Direction: Read the following information carefully and answer the questions that follow.

Nine friends Manish, Vishal, Neha, Anupam, Salman, Ritvik, Asha, Jay and Mahi are filling the form of an exam where they need to enter their year of birth. Every person has a different year of birth among 1986, 1989, 1990, 1994, 1995, 1998, 1999, 2000, 2001 but not necessarily in the same order. No two persons have the same year of birth.

Ritvik is the eldest person and Asha is the youngest person. Vishal was born in 1995 and Manish was born in 1999. Mahi is one year older than Asha and Jay is three years younger than Vishal. Salman was born in 1989. Anupam is older than Neha.
Q. Who was born in the year 1998?
A. Nine friends: Manish, Vishal, Neha, Anupam,Salman, Ritvik, Asha, Jay and Mahi

Year: 1986, 1989, 1990, 1994, 1995, 1998, 1999, 2000, 2001

1) Ritvik is the eldest person and Asha is the youngest person.
(Thus, Ritvik was born in 1986 and Asha was born in 2001)

| Year | Person |
| :---: | :---: |
| 1986 | Ritvik |
| 1989 |  |
| 1990 |  |
| 1994 |  |
| 1995 |  |
| 1998 |  |
| 1999 |  |
| 2000 | Asha |
| 2001 |  |

2) Vishal was born in 1995 and Manish was born in 1999.

| Year | Person |
| :---: | :---: |
| 1986 | Ritvik |
| 1989 |  |


| 1990 |  |
| :---: | :---: |
| 1994 |  |
| 1995 | Vishal |
| 1998 |  |
| 1999 | Manish |
| 2000 |  |
| 2001 | Asha |

3) Mahi is one year older than Asha and Jay is three years younger than Vishal. (Thus, Mahi was born in 2000 and Jay was born in 1998)

| Year | Person |
| :---: | :---: |
| 1986 | Ritvik |
| 1989 |  |
| 1990 |  |
| 1994 | Vishal |
| 1995 | Jay |
| 1998 | Manish |
| 1999 | Mahi |
| 2000 | Asha |
| 2001 |  |

4) Salman was born in 1989.
5) Anupam is older than Neha.
(Only two birth years are remaining. Thus, Anupam was born in 1990 and Neha was born in 1994)

| Year | Person |
| :---: | :---: |
| 1986 | Ritvik |
| 1989 | Salman |
| 1990 | Anupam |
| 1994 | Neha |
| 1995 | Vishal |
| 1998 | Jay |
| 1999 | Manish |
| 2000 | Mahi |
| 2001 | Asha |

Hence, Jay was born in the year 1998.

## Common Mistake

The person born in the year of 1990 is the older than the person born in the year 1992 or any year after 1990.

## Month + Date Based Puzzle

Direction: Study the following information carefully and answer the question given below.
Eight Persons A, S, D, F, G, H, J and K are born in two different months i.e., November and December on four different dates 3rd, 6th, 16th, and 27th. Only person was born on one date.

There are 5 person born between A and H . A and H both born on the date which is divisible by $\mathbf{3}$. S was born in the month which has 30 days. Only one person born between $S$ and $A$. J was born on the date which is prime number. There are two person born between $F$ and $D$. G was born immediately after D. K was born on 3rd December.

## Q. How many person are born between J and F?

A. Let's study the given information.

There are 5 person born between A and H . A and H both born on the date which is divisible by 3 .
Case 1 -

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }}$ Dec | $6^{\text {th }}$ Dec | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  |  |  |  |  | H |

Case 2 -

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }}$ Dec | $6^{\text {th }}$ Dec | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | H |  |  |  |  |  | A |

$S$ was born in the month which has 30 days. Only one person was born between $S$ and $A$. it means $S$ was born on November and Case 2 will be cancelled.

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }}$ Dec | $6^{\text {th }}$ Dec | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  | S |  |  |  | H |

J was born on the date which is prime number. There will be two possibilities Case 1 - J was born on 3rd November.

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }}$ Dec | $6^{\text {th }}$ Dec | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | A |  | S |  |  |  | H |

Case 2 - J was born on 3rd December

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }} \operatorname{Dec}$ | $6^{\text {th }}$ Dec | $16^{\text {th }} \operatorname{Dec}$ | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A |  | S | J |  |  | H |

There are two persons born between F and D. G was born immediately after D. Case -1

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }} \operatorname{Dec}$ | $6^{\text {th }} \operatorname{Dec}$ | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | A | F | S |  | D | G | H |

Case - 2

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }}$ Dec | $6^{\text {th }}$ Dec | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | A | F | S | J | D | G | H |

K was born on 3rd December. Here Case 2 will be cancelled.

| $3^{\text {rd }}$ Nov | $6^{\text {th }}$ Nov | $16^{\text {th }}$ Nov | $27^{\text {th }}$ Nov | $3^{\text {rd }} \operatorname{Dec}$ | $6^{\text {th }} \operatorname{Dec}$ | $16^{\text {th }}$ Dec | $27^{\text {th }}$ Dec |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| J | A | F | S | K | D | G | H |

Hence only person is born between J and F .

## Double Line-up/Multiple Variable Puzzle

In this section, information about the different people will be given. You need to arrange them according to the given data.

Direction: Read the following information carefully and answer the given questions.

A group of friends having seven members A, B, C, D, E, F and G contains four men and three ladies. Each one of them has a different profession - Actor, Music director, Fashion designer, Scientist, Builder, Police and Manager - and each one has passed out of a different school - P, S, V, W, X, Y, and $Z$ not necessarily in the same order. None of the ladies is a Police or an Actor. C is a Fashion designer and she has passed out from 'School $X$ '. A is a 'School $Y$ ' pass out. $B$ is not a Scientist. $E$ is a Manager and is a 'School $S^{\prime}$ pass out. $F$ is an Actor and has not studied in 'School P'. G is a Police and has studied in 'School V'. The Scientist is a 'School Z' pass out. The Music director has studied in 'School

P'. None of the ladies has studied in 'School Y' or 'School S'.
Q. Determine the final combination.
A. Seven friends: A, B, C, D, E, F and G contains four men and three ladies.

Professions: Actor, Music director, Fashion designer, Scientist, Builder, Police and Manager.
Schools: P, S, V, W, X, Y, and Z.

1) $G$ is a Police and has studied in 'School $V$ '.
2) $C$ is a Fashion designer and she has passed out from 'School $X$ '.
3) $A$ is a 'School $Y$ ' pass out.
4) $E$ is a Manager and is a 'School $S^{\prime}$ pass out.
5) F is an Actor.

| Name | Gender | Profession | School |
| :---: | :---: | :---: | :---: |
| A |  |  | $Y$ |
| B |  |  |  |
| C | Female | Fashion <br> designer | X |
| D |  |  |  |
| E |  | Manager | S |
| F |  | Actor |  |
| G |  | Police | V |

6) None of the ladies is a Police or an Actor.
7) None of the ladies has studied in 'School $Y$ ' or 'School S'.

Thus, $B$ and $D$ are ladies.

| Name | Gender | Profession | School |
| :---: | :---: | :---: | :---: |
| A | Male |  | $Y$ |


| B | Female |  |  |
| :---: | :---: | :---: | :---: |
| C | Female | Fashion <br> designer | X |
| D | Female |  |  |
| E | Male | Manager | S |
| F | Male | Actor |  |
| G | Male | Police | V |


| E | Male | Manager | S |
| :---: | :---: | :---: | :---: |
| F | Male | Actor |  |
| G | Male | Police | V |

8) The Scientist is a 'School $Z$ ' pass out.
9) The Music director has studied in 'School P'.

| Name | Gender | Profession | Schol |
| :---: | :---: | :---: | :---: |
| A | Male |  | $Y$ |
| B | Female | Scientist/Music <br> director | Z/P |
| C | Female | Fashion designer | X |
| D | Female | Scientist/Music <br> director | Z/F |

10) B is not a Scientist. Thus, B is a Music director.
Therefore, D is a Scientist.

| Name | Gender | Profession | Sch <br> I |
| :---: | :---: | :---: | ---: |
| A | Male |  | Y |
| B | Female | Music <br> director | P |
| C | Female | Fashion <br> designer | X |
| D | Female | Scientist | Z |
| E | Male | Manager | S |
| F | Male | Actor |  |
| G | Male | Police | V |

11) F has not studied in 'School P'.

The only school left for F is W .

Since only A and profession Builder is left, A is a Builder.

| Name | Gender | Profession | School |
| :---: | :---: | :---: | :---: |
| A | Male | Builder | Y |
| B | Female | Music <br> director | P |
| C | Female | Fashion <br> designer | X |
| D | Female | Scientist | Z |
| E | Male | Manager | S |
| F | Male | Actor | W |
| G | Male | Police | V |

## Box Puzzle

In this section, you need to arrange the boxes one above the other.
Direction: Nine boxes having a unique fruit or vegetable (apple, pear, orange, carrot, onion, ginger, lemon, garlic, and potato) are placed vertically one above the other but not necessarily in the same order. Gingers are kept on top and the onions are kept 1 place above the bottom box. Oranges are in the box that is kept at the 4thposition from the top. There are only 4 boxes between apple box and potato box. Lemons and pear are not kept at the bottom. Garlic box is kept 2 boxes above the pear box.
Q. Which box is kept between garlic and pear box?
A. 1) Gingers are kept on top and the onions are kept 1 place above the bottom box.

| Ginger |
| :---: |
|  |
|  |
|  |
|  |
|  |
|  |
| Onion |
|  |

2) Oranges are in the box that is kept at the 4thposition from the top.

| Ginger |
| :---: |
|  |
|  |
| Orange |
|  |
|  |
|  |
| Onion |
|  |

3) There are only 4 boxes between apple box and potato box.

| Ginger |
| :---: |
| Apple/Potato |
|  |
| Orange |
|  |
|  |
| Potato/Apple |
| Onion |
|  |

4) Lemons are not kept at the bottom.
5) Garlic box is kept 2 boxes above the pear box.

Therefore, lemon box will be kept immediately below pear box

| Ginger |
| :---: |
| Apple/Potato |
| Garlic |
| Orange |


| Pear |
| :---: |
| Lemon |
| Potato/Apple |
| Onion |
|  |

Now, only 1 place is left for the only left box i.e., carrot box.

| Ginger |
| :---: |
| Apple/Potato |
| Garlic |
| Orange |
| Pear |
| Lemon |
| Potato/Apple |
| Onion |
| Carrot |

Hence, Orange is the correct answer.

