

Chapter-2

LOGIC

Why do we **Code**?

We code to create software.



Why to create **Software**?

- Software assists in getting tedious tasks done efficiently and with ease.
- To solve a particular problem.

Why Logic is important in Software development?

To solve a particular problem, it is very important to **first know and understand the problem.**

After understanding, the most important thing is to find a **best solution to a problem.**

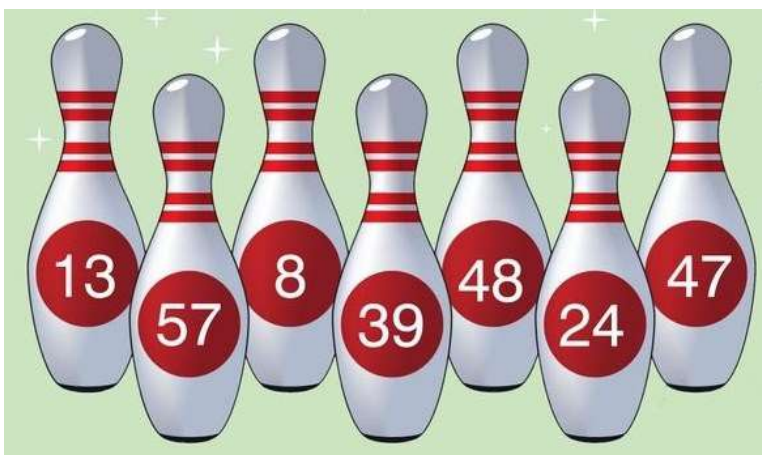
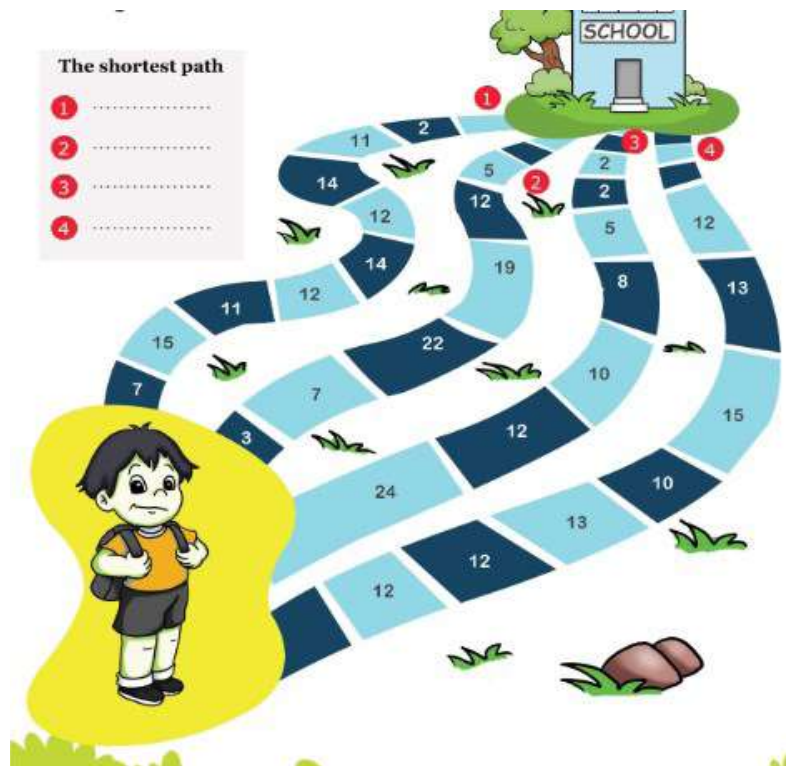
- Finding the best and optimal solution is **Logic**.
- You should spend good time in designing the Logic before starting your code.
- Your software is going to be as good or as bad as your Logic is.
- You should consistently check your logic and improvise if required.
- Wherever applicable, get your Logic reviewed with others before implementation.

Let us solve some problems logically

$$\begin{array}{l} 1 + 4 = 5 \\ 2 + 5 = 12 \\ 3 + 6 = 21 \\ 8 + 11 = ? \end{array}$$

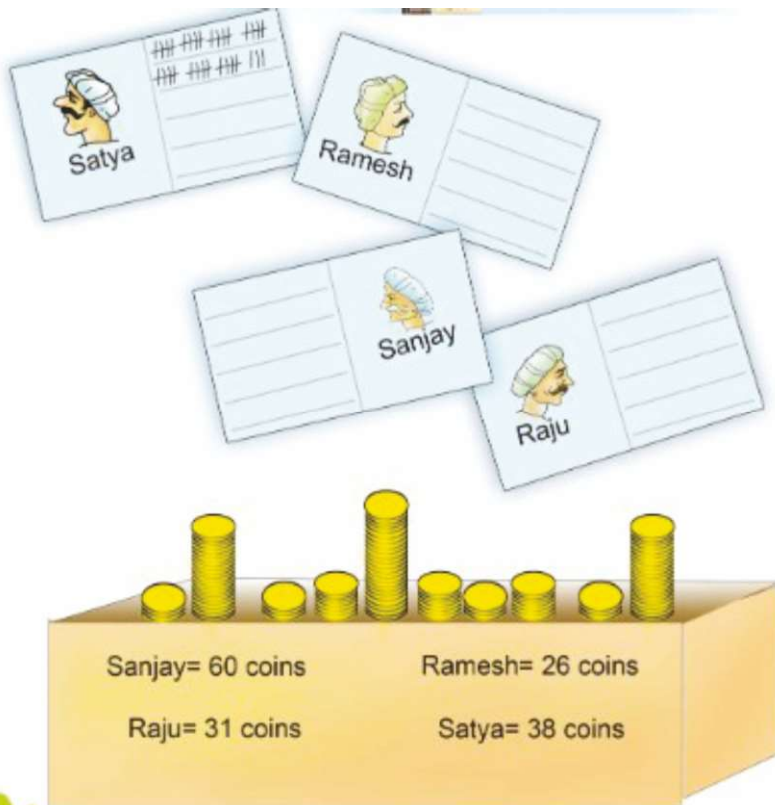
Find the shortest path to the school. There are **4** paths and number of **steps** that **Sam** must take is written on each stone.

Find the path where he has to **walk** the **least**.



Which pins must be knocked over to score exactly 100 points?

Complete the passbook for these people



Sanjay_____

Ramesh_____

Raju_____

Satya_____

Solve the equation using three of these symbols

- +
- -
- *
- /

$$2 \square 1 \square 6 \square 6 = 48$$

Very Important Note

Anyone can learn a programming language and understand its syntax to code. But the important aspect is to apply

Right Logic

Logic is not limited to Computer science. You apply logic in everything

- ✓ Cooking a great meal
- ✓ Selection of dress for a day
- ✓ Buying mobile phone
- ✓ Booking movie ticket

Good logic in programming is a **fundamental key** to **create good software** and being a **good developer**. Developing good logic is the fool-proof method for you to learn and navigate through different programming languages flexibly.

Now, let's dive into understanding coding and its concepts.