



# Algorithm




# Algorithm for Maggi

A decorative graphic in the top-left corner of the slide, consisting of several parallel lines in blue and grey that form the shape of a folded piece of paper or a paper airplane.

# Algorithm for making paper aeroplane

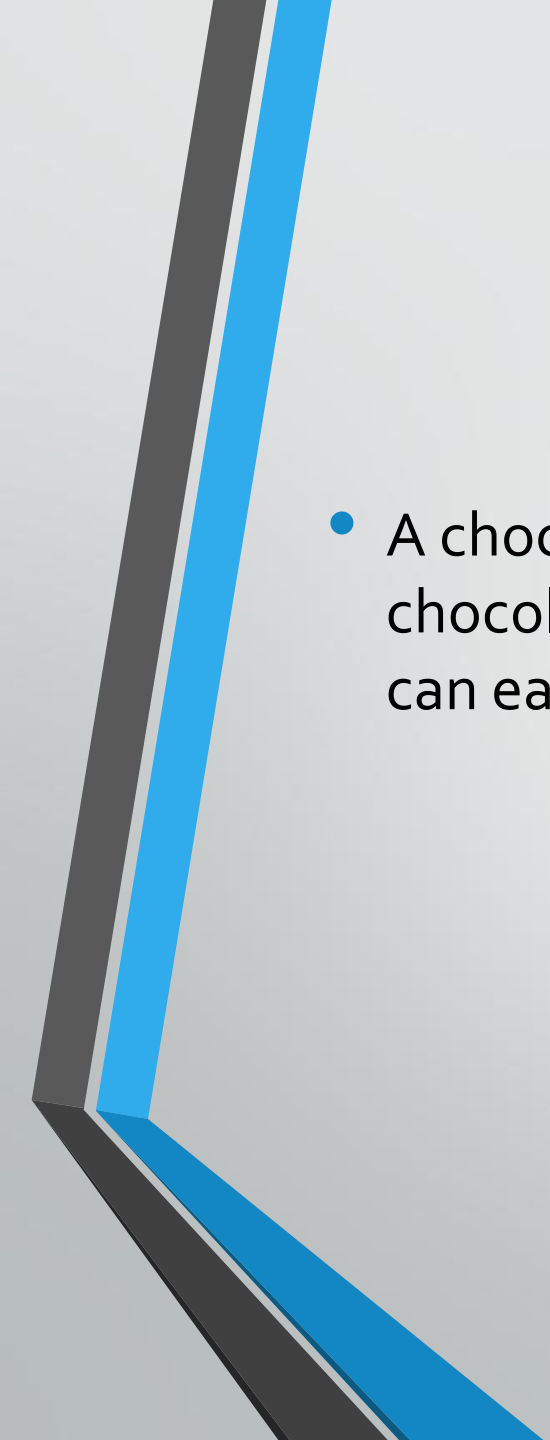


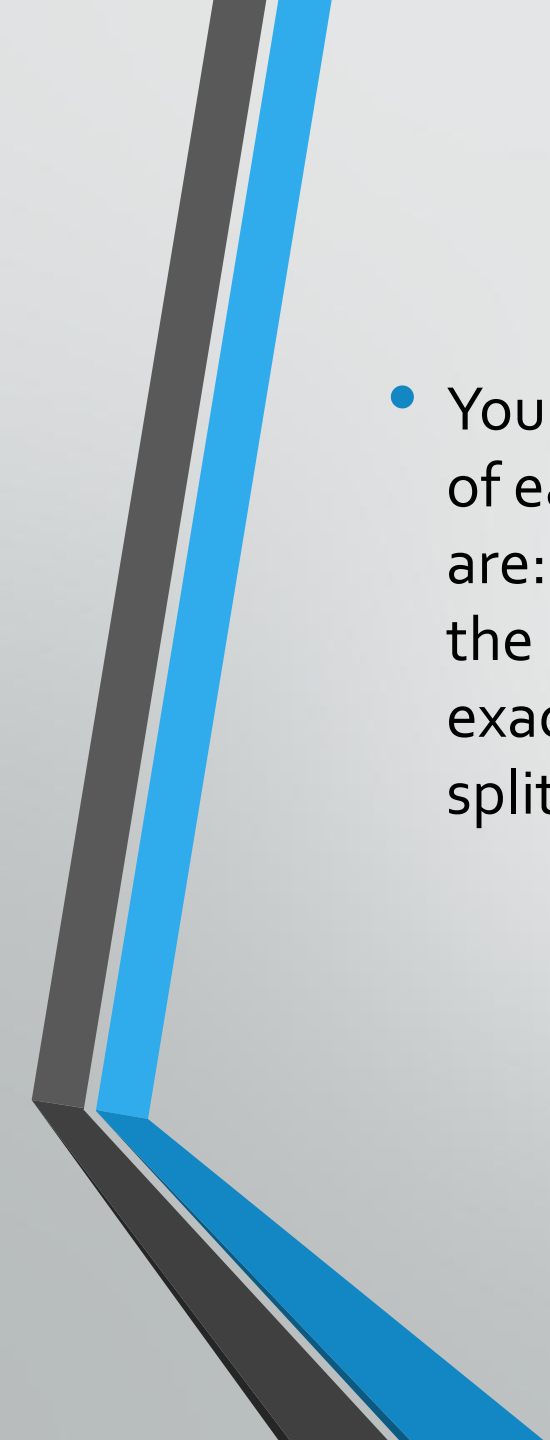
# Setup

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- Open chrome and download VsCode
  - Open another tab and download MinGW
  - Open the MinGW click on install
  - After installing mark all the basic packages and apply the changes
  - After the apply changes open the file explorer
  - Go to C Drive -> MinGW -> bin and copy the path
  - After the copy, search environment variable on the laptop
  - Go to path button and click on it
  - Add the copied path to there and close it




# Questions

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- A chocolate costs ₹1 each. For every 3 wrappers, you can get 1 additional chocolate for free. If you have ₹40, find out how many total chocolates you can eat, using the above scheme optimally.

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- You hire a worker for 7 days and agree to pay them 1 unit of gold at the end of each day. However, you only have a single 7-unit gold bar. The conditions are: The worker must be paid exactly 1 unit per day. You are allowed to cut the gold bar into pieces. After cutting, you can use those pieces to make exact payments each day. What is the minimum number of cuts required to split the gold bar so that you can pay the worker correctly for all 7 days?

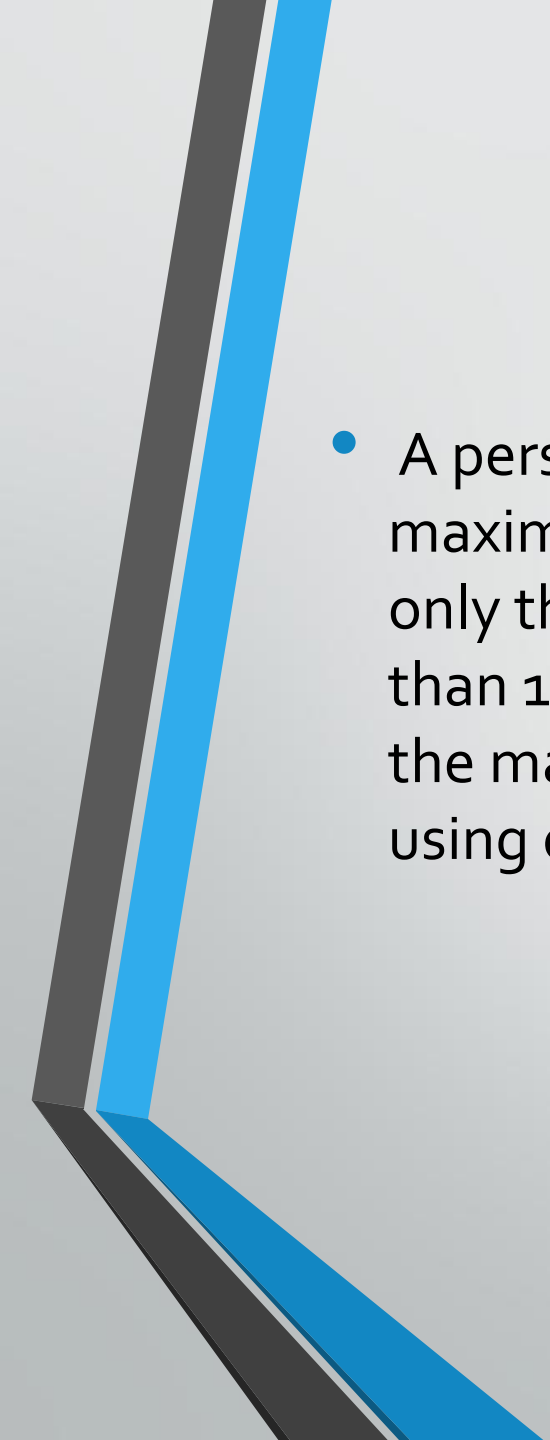


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- Given two hourglasses of 4 minutes and 7 minutes, the task is to measure 9 minutes

- Four people — A, B, C, and D — need to cross a bridge at night. They have only one torch, and the bridge is too dangerous to cross without it. At most two people can cross at a time, and when two people cross together, they must move at the slower person's speed.

The time each person takes to cross the bridge is as follows:

- A → 1 minute
- B → 2 minutes
- C → 7 minutes
- D → 13 minutes
- You must determine the minimum total time required for all four people to cross the bridge safely, following the above rules.

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- A person has 3000 bananas and a camel. The person wants to transport the maximum number of bananas to a destination that is 1000 km away, using only the camel as a mode of transportation. The camel cannot carry more than 1000 bananas at a time and eats a banana every km it travels. What is the maximum number of bananas that can be transferred to the destination using only a camel (no other mode of transportation is allowed)?