

CS6102– Computational Thinking

Week -9

18 – Feb-2022

Algorithmic Decomposition and Flowchart

1. Write an algorithm to read two numbers from user, add and print the result.
2. Write an algorithm to print your address in the following format:
Name,
Register number,
Department,
University,
Place – pin code.
3. Write an algorithm to find average age of a group of 10 players?
4. Write an algorithm to this problem: Ramshevak goes to market for buying some fruits and vegetables. He is having a currency of Rs 500 with him for marketing. From a shop he purchases 2.0 kg Apple priced Rs. 50.0 per kg, 1.5 kg Mango priced Rs.35.0 per kg, 2.5 kg Potato priced Rs.10.0 per kg, and 1.0 kg Tomato priced Rs.15 per kg. He gives the currency of Rs. 500 to the shopkeeper. Find out the amount shopkeeper will return to Ramshevak and also tell the total item purchased
5. Design an algorithm to convert a decimal number, n, to binary format?
6. Write an algorithm to swap two numbers and draw the flow chart for the same.
7. Draw a flowchart to find the sum of first 100 natural numbers.
8. Draw a flowchart which generates first 50 items of the Fibonacci series:
1, 1, 2, 3, 5, 8,...?
9. Write an algorithm to read a character in upper case and then print it in lower case.
10. Write an algorithm to read numbers from the user until -1 is encountered. Count the number of Positive, negative and zero entered by the user.