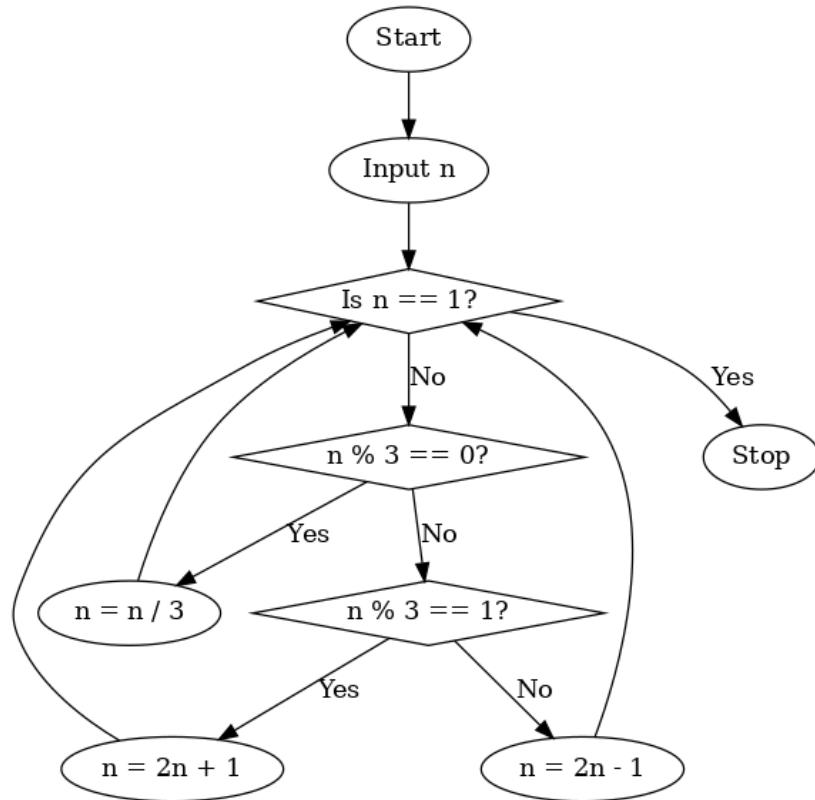


A

Programming Fundamentals

Q1: Flowchart Dry Run

Task: Dry run this flowchart for $n = 10$.



Dry Run Table:

Q2: Word Problem

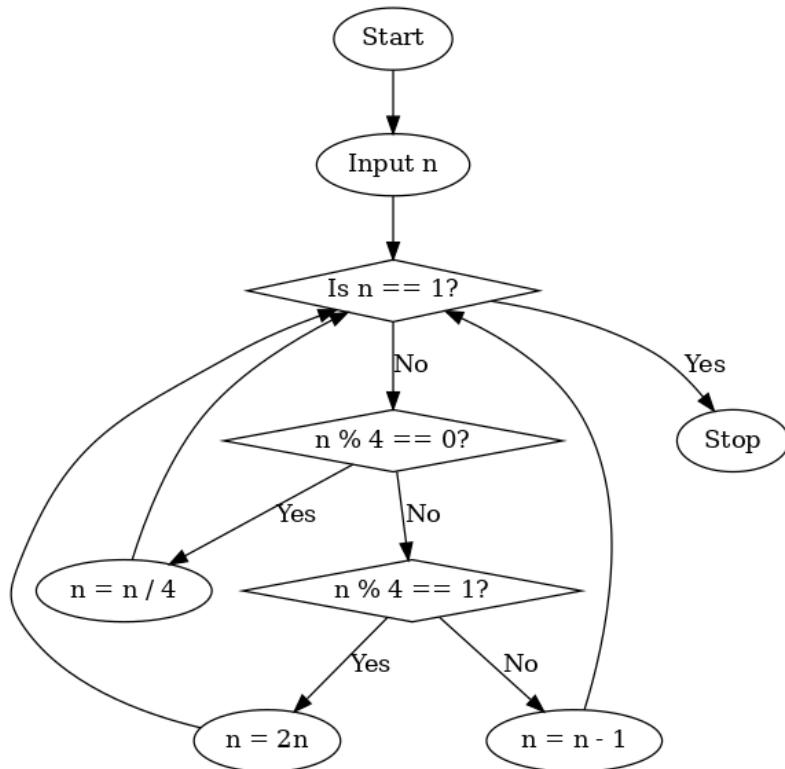
A taxi company charges a base fare of \$100. For the first 10 km, the cost is \$20 per km. Beyond 10 km and up to 30 km, the cost is \$15 per km. Beyond 30 km, the cost is \$10 per km. If the ride is at night, the total fare has a 10% surcharge. If the passenger is a registered member, they receive a 5% discount before the surcharge is applied. Design a flowchart to calculate the total fare.

B

Programming Fundamentals

Q1: Flowchart Dry Run

Task: Dry run this flowchart for $n = 10$.



Dry Run Table:

Q2: Word Problem

An electricity company charges households based on usage. The first 100 units cost \$5 per unit. Any usage from 101 to 300 units costs \$8 per unit. Beyond 300 units, the cost is \$10 per unit. A fixed service charge of \$50 is added to every bill. Additionally, if the total bill exceeds \$5000, a 5% rebate is applied. Construct a flowchart to calculate the final bill.