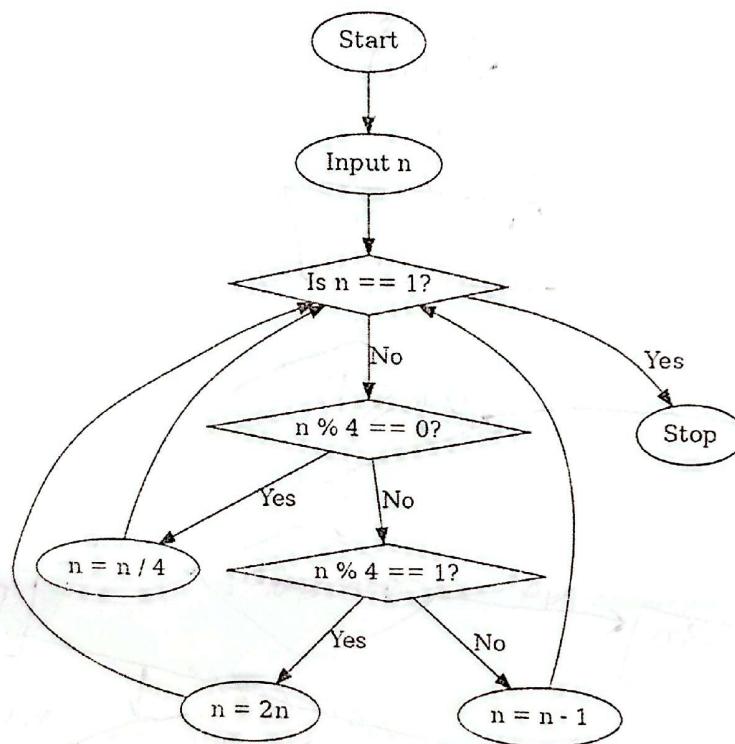


A

Name:	Roll No.:
Programming Fundamentals	
Quiz 1	Section I
Marks: 20	Time: 20 Minutes

Q1: Flowchart Dry Run

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



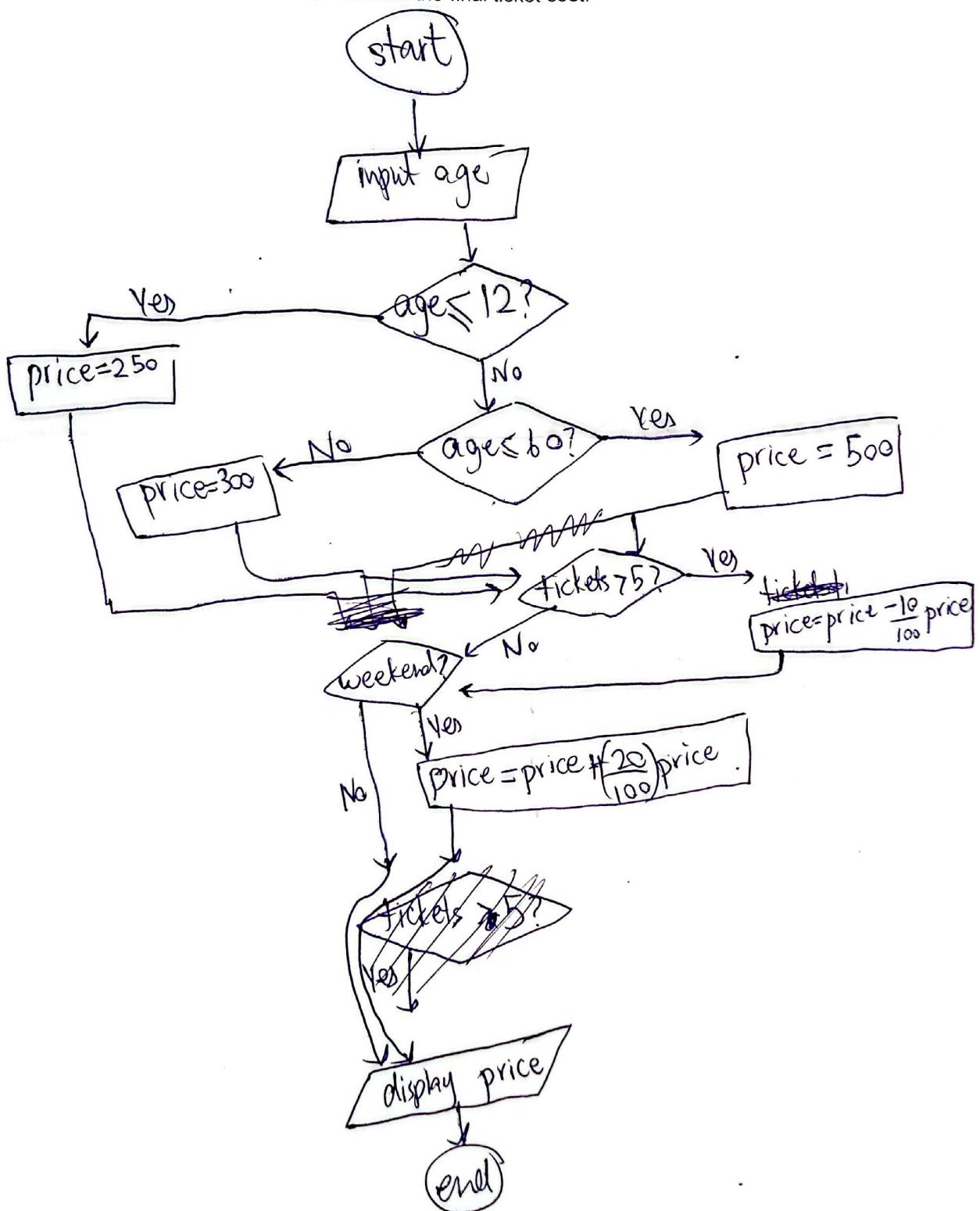
Dry Run Table:

Iteration	n	$n \% 4$				
1	10	2				
2	9	1				
3	18	2				
4	17	1				
5	34	2				
6	33	1				
7	66	2				
8	65	1				
9	130	2				
10	129	1				

infinite loop.

Q2: Word Problem

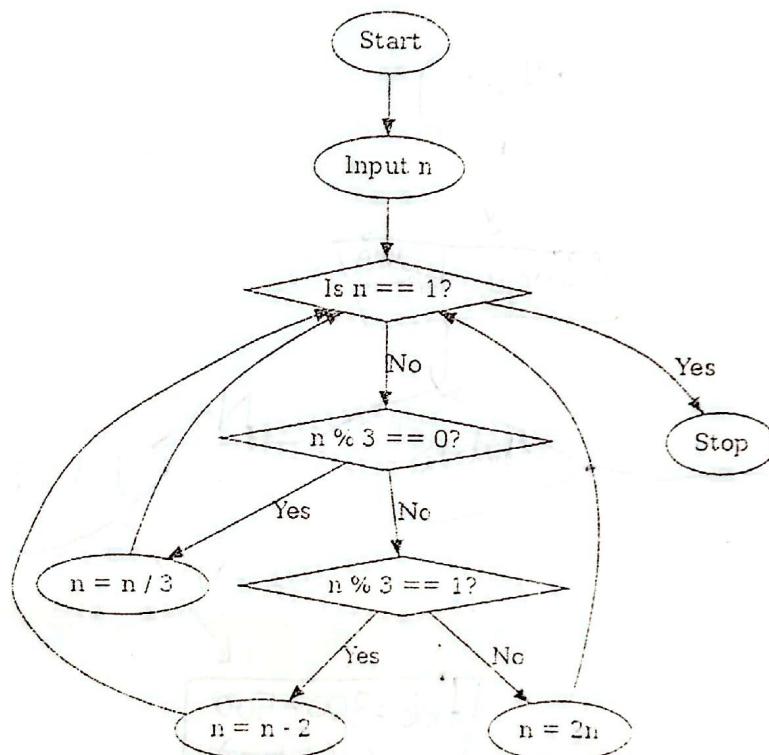
A cinema charges adults \$500, children under 12 years \$250, and senior citizens aged 60 or older \$300. On weekends, there is a 20% surcharge on the total bill. If the booking is for more than 5 tickets in total, a group discount of 10% is applied before any weekend surcharge. Draw a flowchart to calculate the final ticket cost.



Name:	Roll No.:
Programming Fundamentals	
Quiz 1	Section I
Marks: 20	Time: 20 Minutes

Q1: Flowchart Dry Run

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



Dry Run Table.

iteration	n	$n \cdot 13$
1	10	1
2	8	2
3	16	1
4	14	2
5	28	1
6	26	2
7	52	1
8	50	2
9	100	1

infinite loop

Q2: Word Problem

A mobile company charges a base fee of \$300. The plan includes 5 GB of data. Between 6 and 10 GB, the charge is \$50 per GB. Beyond 10 GB, the charge is \$80 per GB. If the total data used is above 20 GB, the customer also pays a \$200 penalty for heavy usage. Create a flowchart to calculate the monthly bill.

