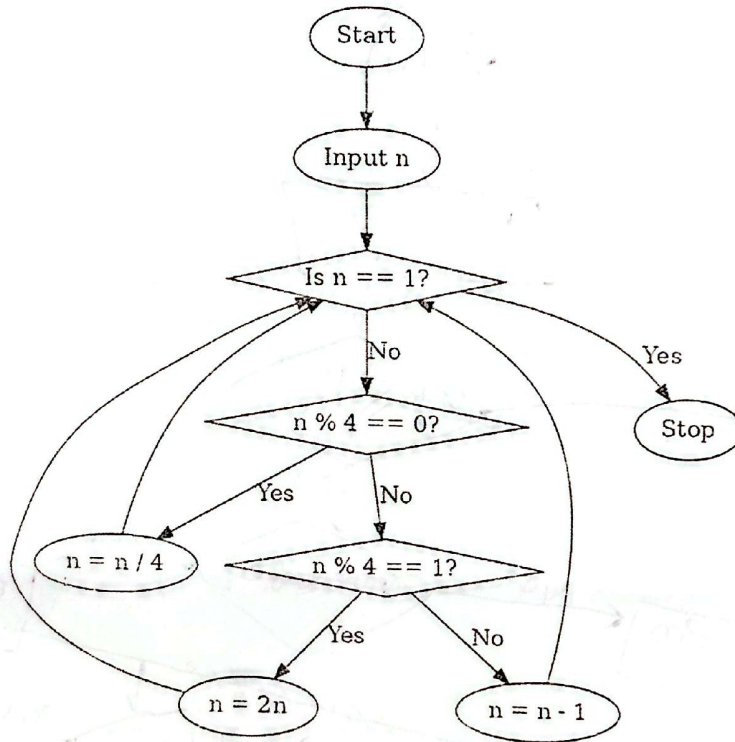


A

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

Q1: Flowchart Dry Run

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



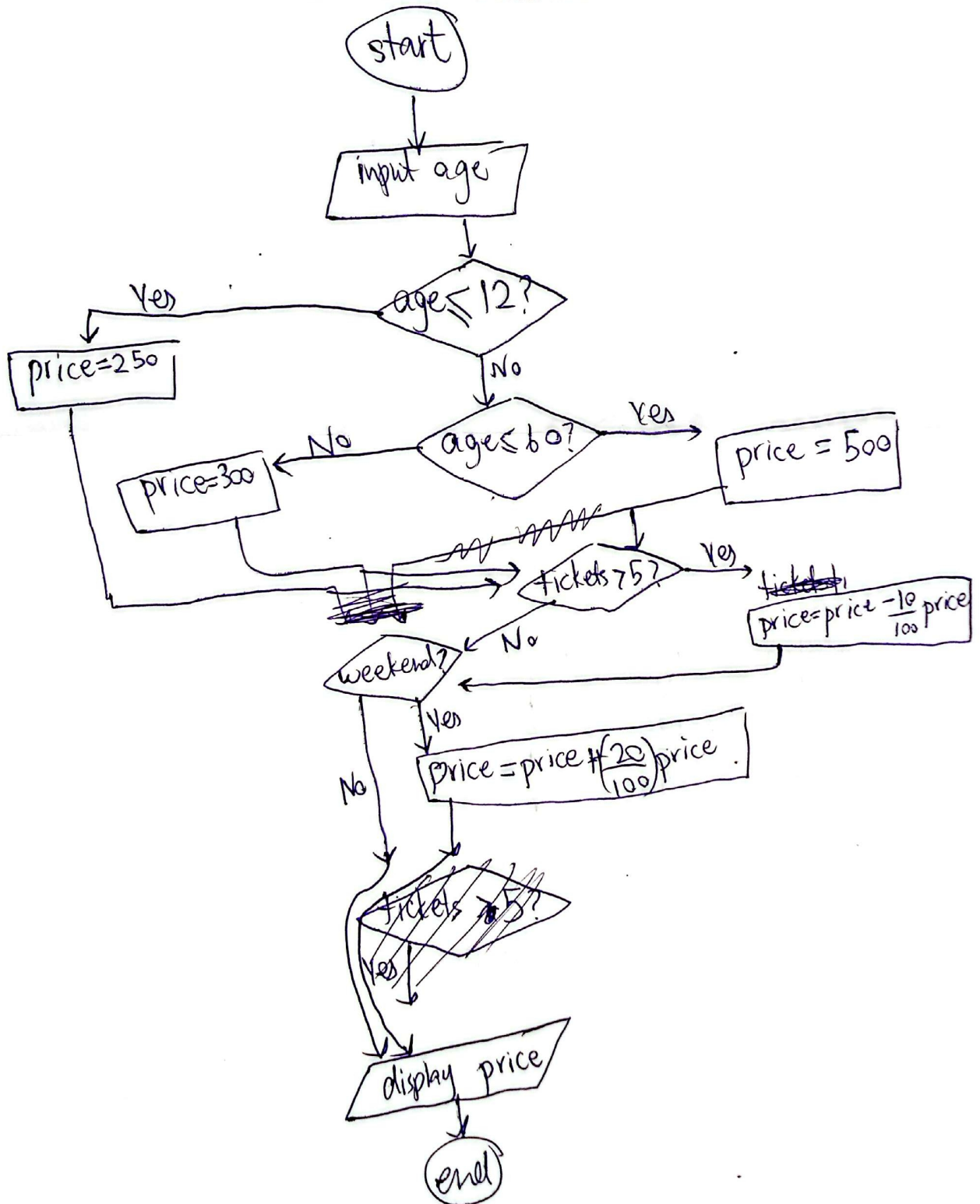
Dry Run Table:

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

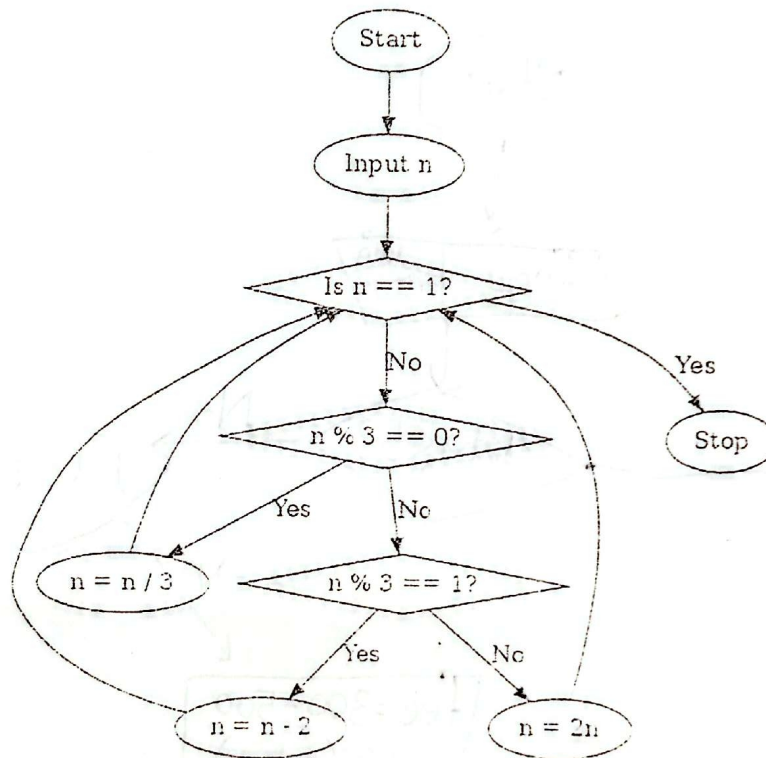
A cinema charges adults \$500, children under 12 years \$250, and senior citizens aged 60 or older \$300. On weekends, there is a 20% surcharge on the total bill. If the booking is for more than 5 tickets in total, a group discount of 10% is applied before any weekend surcharge. Draw a flowchart to calculate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



B

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/3		
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.

