i. **Q:** *The source code you just typed up, BoxOffice.cpp. In other words, explain what is happening in BoxOffice.cpp in logical steps. (check text for keywords you don’t understand)*

**A:**

Input:

1) Ask user for the name of the movie → var string

2) Ask user for the number of adult tickets sold → var integer

3) Ask user for the number of child tickets sold → var integer

Process:

4) gross profit =

(adult tickets sold \* price of adult tickets) + (child tickets sold \* price of child tickets)

← const ‘price of adult tickets’ double ← const ‘price of child tickets’ double

→ var double

5) net profit = percentage kept \* gross profit ← const ‘percentage kept’ double

→ var double

6) distributor’s cut = gross profit – net profit → var double

Output:

7) Display user input: name of the movie, number of adult tickets sold, and number of child

tickets sold

8) Display calculations: gross profit, net profit, and distributor’s cut in currency format (two

significant figures after the decimal point)

ii. **Q:** *To multiply two 2 - digit numbers*

**A:**

Input:

1) Ask user for number one → var integer

2) Ask user for number two → var integer

Process:

3) product for first digit = number two’s first digit \* number one → var integer

4) product for second digit = number two’s second digit \* number one \* 10 placeholder

→ var integer

5) final product = product for first digit + product for second digit → var integer

Output:

6) Display final product