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**Program Description:**

This program is intended to sell a total of 20 cinema tickets for a pre-sell, in which each buyer can only buy up to 4 tickets at a time. The program will prompt the user for the desired number of tickets and then display the number of remaining tickets after their purchase. This will all be repeated until all tickets have been sold. Then it will display the total number of buyers.

**Functions used in the Program (list in order as they are called):**

1. **Function Name:** def sell\_tickets ()

**Description:** This function is responsible with dealing with ticket sales, prompting user for input and updating quantity of tickets remaining.

**Parameters:** N/A

**Variables:**

1. tickets\_remaining (integer) – keeps track of how many tickets left to sell
2. buyers\_total interger) – keeps track of how many buyers there were total
3. ticktes\_wanted (input) – the number of tickets that the user inputs is looped and stored

**Logical Steps:**

1. Begin by setting accumulator values to 0
2. Create a while statement for a loop (ex. while tickets\_remaining > 0:)
3. Set restrictions to the loop, if the tickets wanted is more than or equal to 1 but still less than the number of tickets max per user and tickets remaining, the program will continue.
4. Else statement: the request will be invalid and the message will be printed
5. Return buyers\_total

**Returns:** buyers\_total (integer): a whole number representing the total number of buyers; it’s accumulated +=1

1. **Function Name:** def display\_results (buyers\_total):

**Description:** This function display the results of the ticket sale, in terms of buyers. **Parameters:** buyers\_total is the parameter of the function that calls back a value that was previously returned

**Variables:**

1. buyers\_total (integer); the variable represents a value which is the total number of buyers

**Logical Steps:**

1. define the function
2. calls back returned value
3. and displays back that output

**Returns:** None

**Logical Steps:**

1. Call the sell\_tickets function then assign it to buyers\_total storing the value allowing it to used in the next function
2. Call the display\_results(buyers\_total) function

**Link to repository:** https://github.com/lrubioro/PythonCOP2373.git