PROJECT: (WK-04) A night at the theatre

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**INPUT VALUES:**  
**in01** = Total number in party, **in02** = Total adults in party  
**in03** = Number of concessions, **in04** = Collect tickets in person

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|  | **INPUT VALUE(S)** | **REASON FOR TEST** | **EXPECTED OUTPUT** | **ACTUAL OUTPUT** |
| **TEST-01** | in01 = 0  in02 = 0  in03 = 0  in04 = y | Test program with zero values. | **Should output:**   * 0 Children * 0 Adults * Not show concessions * No free place discounts * No 10% discount * No postage * TOTAL: £0.00 | **Actual output:**   * 0 Children * 0 Adults * No concessions * No free place discounts * No 10% discount * No postage * TOTAL: £0.00 |
| **TEST-02** | in01 = 2  in02 = 1  in03 = 0  in04 = y | Test program with 1 child and 1 adult to output expected constant values for single ticket prices. | **Should output:**   * 1 Child - in01 (2) – in02 (1) @ £7.30 (1 \* 7.3) * 1 Adult – in02 @ £10.50 (1 \* 10.5) * Not show concessions * No free place discounts * No 10% discount * No postage * TOTAL: £17.80 10.50 + 7.30 | **Actual output:**   * 1 Child @ £7.30 * 1 Adult @ £10.50 * No concessions * No free place discounts * No 10% discount * No postage * TOTAL: £17.80 |
| **TEST-03** | in01 = 2  in02 = 1  in03 = 0  in04 = n | Test program with 1 child and 1 adult to output expected constant values for single ticket prices. Also test postage and packaging output.  **[theatre\_test1.jpg]** | **Should output:**   * 1 Child - in01 (2) – in02 (1) @ £7.30 (1 \* 7.3) * 1 Adult – in02 @ £10.50 (1 \* 10.5) * Not show concessions * No free place discounts * No 10% discount * Postage @ £2.34 * TOTAL: £20.14 10.50 + 7.30 + 2.34 | **Actual output:**   * 1 Child @ £7.30 * 1 Adult @ £10.50 * No concessions * No free place discounts * No 10% discount * Postage @ £2.34 * TOTAL: £20.14 |
| **TEST-04** | in01 = 3  in02 = 2  in03 = 1  in04 = y | Test program with 1 child, 1 adult and 1 concession, to output expected constant values for all single ticket prices. | **Should output:**   * 1 Child - in01 (2) – in02 (1) @ £7.30 (1 \* 7.3) * 1 Adult – in02 @ £10.50 (1 \* 10.5) * 1 concession - in03 @ £8.40 (1 \* 8.4) * No free place discounts * No 10% discount * No postage * TOTAL: £26.20 10.50 + 7.30 + 8.40 | **Actual output:**   * 1 Child @ £7.30 * 1 Adult @ £10.50 * 1 concession @ 8.40 * No free place discounts * No 10% discount * No postage * TOTAL: £26.20 |
| **TEST-05** | in01 = 11  in02 = 1  in03 = 0  in04 = y | Test program to show 1 adult discount.  **[theatre\_test2.jpg]** | **Should output:**   * 10 Children - in01 (2) – in02 (1) @ £73.00 (10 \* 7.3) * 1 Adult – in02 @ £10.50 (1 \* 10.5) * No concessions * 1 Adult place discount @ - £10.50 * No 10% discount * No postage * TOTAL: £73.00 (73.00 + 10.50) – 10.50 | **Actual output:**   * 10 Children @ £73.00 * 1 Adult @ £10.50 * No concessions * 1 Adult free place discount  @ - £10.50 * No 10% discount * No postage * TOTAL: £73.00 |
| **TEST-06** | in01 = 15  in02 = 1  in03 = 0  in04 = y | Test program to show 10% discount.  **[theatre\_test3.jpg]** | **Should output:**   * 14 Children - in01 (2) – in02 (1) @ £102.20 (14 \* 7.3) * 1 Adult – in02 @ £10.50 (1 \* 10.5) * No concessions * 1 Adult place discount @ - £10.50 * 10% discount @ - £10.22 * No postage * TOTAL: £91.98 (102.20 + 10.50) – 10.50, - 10.22 | **Actual output:**   * 14 Children @ £102.20 * 1 Adult @ £10.50 * No concessions * 1 Adult free place discount  @ - £10.50 * 10% discount @ - £10.22 * No postage   TOTAL: £91.98 |
| **TEST-07** | in01 = 26  in02 = 6  in03 = 2  in04 = n | Test program to show at least 1 concession.  **[theatre\_test4.jpg]** | **Should output:**   * 21 Children - in01 (2) – in02 (1) @ £153.30 (21 \* 7.3) * 3 Adults – in02 @ £31.50 (3 \* 10.5) * 2 Concessions – in03 @ £16.80 (2 \* 8.4) * 2 Adult place discounts @ - £21.00 (2 \* 10.5) * 10% discount @ - £18.06 * Postage @ £2.34 * TOTAL: £164.88 (153.30 + 31.50 + 16.80) – 21.00, - 18.06,  + 2.34 | **Actual output:**   * 21 Children @ £153.30 * 3 Adults @ £31.50 * 2 Concessions @ 16.80 * 2 Adult free place discounts  @ - £21.00 * 10% discount @ - £10.22 * Postage @ £2.34 * TOTAL: £164.88 |