|  |  |  |
| --- | --- | --- |
| Input | Processing | Output |
| Buyer’s Name  Seat Number  Delivery Method | * Prompt for buyers\_Name * Read buyers\_Name * Validate buyers\_Name * Prompt for seat\_Number * Read seat\_Number * Validate seat\_Number * Prompt for delivery\_Method * Read delivery\_Method * Validate delivery\_Method * Calculate total ticket cost * Print Buyer’s name, seat number, delivery method, ticket base cost, seat cost, convenience fee, total cost | buyers\_Name  seat\_Number  delivery\_Method  ticket\_Base\_Cost  seat\_Cost, total\_Convenience\_Fee, total\_Ticket\_Cost |

George Huang

Begin GetTicketCost

1. SET ticket\_Base\_Cost = 10.60
2. SET seat\_Cost\_1\_55 = 0
3. SET seat\_Cost\_56\_106 = 7.45
4. SET seat\_Cost\_107\_206 = 14.30
5. SET seat\_Cost\_207\_306 = 35.16
6. SET emailed\_Convenience\_Fee\_Percent = 0.01
7. SET shipped\_Convenience\_Fee\_Percent = 0.03
8. SET buyers\_Name = “”
9. SET seat\_Cost
10. SET total\_Ticket\_Cost = 0
11. SET total\_Convenience\_Fee = 0
12. SET total\_Cost = 0
13. SET error = false
14. PROMPT for buyers\_Name

READ buyers\_Name

1. IF buyers\_Name = “” THEN  
    error = true

ENDIF

1. IF error = false THEN

PROMPT for seat\_Number

READ seat\_Number

1. IF seat\_Number >= 1 AND seat\_Number <= 55 THEN

seat\_Cost = seat\_Cost\_1\_55

ELSEIF seat\_Number >= 56 AND seat\_Number <=106 THEN

seat\_Cost = seat\_Cost\_56\_106

ELSEIF seat\_Number >= 107 AND seat\_Number <=206 THEN

seat\_Cost = seat\_Cost\_107\_206

ELSEIF seat\_Number >= 207 AND seat\_Number <=306 THEN

seat\_Cost = seat\_Cost\_207\_306

ELSE

error = true

ENDIF

ENDIF

1. IF error = false THEN  
    PROMPT for delivery\_Method  
    READ delivery\_Method
2. IF delivery\_Method = emailed THEN  
    total\_Convenience\_Fee = (ticket\_Base\_Cost + seat\_Cost) \* emailed\_Convenience\_Fee\_Percent  
    ELSEIF delivery\_Method = shipped THEN

total\_Convenience\_Fee = (ticket\_Base\_Cost + seat\_Cost) \* shipped\_Convenience\_Fee\_Percent

ELSE

error = true

ENDIF

ENDIF

1. total\_Ticket\_Cost = ticket\_Base\_Cost + seat\_Cost + total\_Convenience\_Fee
2. IF error = false THEN

PRINT buyers\_Name, PRINT seat\_Number, PRINT delivery\_Method, ticket\_Base\_Cost, seat\_Cost, total\_Convenience\_Fee, total\_Ticket\_Cost

ELSE

PRINT ‘Ticket cannot be purchased at this time. Please call the ticket office’

ENDIF

END

Input Test Data

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | First data set | Second data set | Third data set | Fourth data set | Fifth data set | Sixth data set |
| Name | George | Kristy | Vincent |  | Mason | Hersh |
| Seat Number | 69 | 205 | 305 | 54 | 308 | 200 |
| Delivery Method | shipped | emailed | shipped | emailed | shipped | Pick up |

Expected Result

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | First data set | Second data set | Third data set | Fourth data set | Fifth data set | Sixth data set |
| Name | George | Kristy | Vincent | ERROR | Mason | Hersh |
| Seat Number | 69 | 205 | 305 |  | ERROR | 200 |
| Delivery Method | shipped | emailed | shipped |  |  | ERROR |
| Ticket Base Cost | $10.60 | $10.60 | $10.60 |  |  |  |
| Seat Cost | $7.45 | $14.30 | $35.16 |  |  |  |
| Convenience Fee | $0.54 | $0.25 | $1.37 |  |  |  |
| Total Cost | $18.59 | $25.15 | $47.13 |  |  |  |

Desk Checking Table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Name | Seat Number | Delivery  Method | Ticket Base Cost | Seat Cost | Convenience Fee | Total Cost |
| First Pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  | $10.60 | $0 | $0 | $0 |
| 14,15 | George |  |  |  |  |  |  |
| 16 |  | 69 |  |  |  |  |  |
| 17 |  |  |  |  | $7.45 |  |  |
| 18 |  |  | shipped |  |  |  |  |
| 19 |  |  |  |  |  | $0.54 |  |
| 20 |  |  |  |  |  |  | $18.59 |
| 21 | Print | print | print | print | print | print | print |
| Second Pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  | $10.60 | $0 | $0 | $0 |
| 14,15 | Kristy |  |  |  |  |  |  |
| 16 |  | 205 |  |  |  |  |  |
| 17 |  |  |  |  | $14.30 |  |  |
| 18 |  |  | emailed |  |  |  |  |
| 19 |  |  |  |  |  | $0.25 |  |
| 20 |  |  |  |  |  |  | $25.15 |
| 21 | Print | Print | Print | Print | Print | Print | Print |
| Third Pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  | $10.60 | $0 | $0 | $0 |
| 14,15 | Vincent |  |  |  |  |  |  |
| 16 |  | 305 |  |  |  |  |  |
| 17 |  |  |  |  | $35.16 |  |  |
| 18 |  |  | shipped |  |  |  |  |
| 19 |  |  |  |  |  | $1.37 |  |
| 20 |  |  |  |  |  |  | $47.13 |
| 21 | Print | print | print | print | print | print | print |
| Fourth pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  |  |  |  |  |
| 14,15 | ‘’ |  |  |  |  |  |  |
| 16 | Error |  |  |  |  |  |  |
| Fifth pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  | $10.60 | $0 | $0 | $0 |
| 14,15 | Mason |  |  |  |  |  |  |
| 16 |  | 308 |  |  |  |  |  |
| 17 |  | Error |  |  |  |  |  |
| Sixth pass |  |  |  |  |  |  |  |
| 1-13 |  |  |  | $10.60 | $0 | $0 | $0 |
| 14,15 | Hersh |  |  |  |  |  |  |
| 16 |  | $200 |  |  |  |  |  |
| 17 |  |  |  |  | $14.30 |  |  |
| 18 |  |  | Pick up |  |  |  |  |
| 19 |  |  | Error |  |  |  |  |