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The IPO Model of the Ferry Company

INPUTS	PROCESS	OUTPUTS
trip	Read trip Loop Display schedule Endloop Display destination	schedule destination
ferryNo deckNo seatNo	Loop Read ferryNo Read deckNo Read seatNo Endloop Assign ferry seat Determine ferry Seat Display ticketId	ticketId
return oneWay	Read return Read oneWay Assign ticketEntry Display ticketEntry	ticketEntry
individual familyPackage	Read individual Read familyPackage Determine ticket Display ticket	totalFerryPrice
noAdult noSeCitizen noChild price	Read noAdult Read noSeCitizen Read noChild Read price Determine ticket Determine addTicket calculate totalFerryPrice Display totalPrice	totalFerryPrice

meal salad fBuffet bread snacks teaCoffee fJuice wine	Read meal Read salad Read fBuffet Read bread Read snacks Read teaCoffee Read fJuice Read wine Calculate totalQuFoodDrinks Display totalQuFoodDrinks Display foodDrinks	totalQuFoodDrinks foodDrinks
foodDrinks price	Read foodDrinks Read price Calculate totalOrderPrice Display totalOrderPrice	totalOrderPrice
totalFerryPrice totalOrderPrice	Read totalFerryPrice Read totalOrderPrice Calculate overallPay Display overallPay	overallPay

Pseudocode

```
BEGIN

DECLARE destination, ticket, addTicket, foodDrinks, selectSeat AS CHAR

DECLARE ferryNo, seatNo, deckNo, ticketEntry, noAdult, noSeCitizen, noChild,
meal, salad, fBuffet, bread, snacks, teaCoffee, fJuice, wine, fTotalPeopleTravel,
totalQuFoodDrinks, ferryPenang[9][5][11] = { 0 }, ferryLangkawi[9][5][11] = { 0 } AS
INTEGER

DECLARE i1WayTotalPrice, i234WayTotalPrice, fWayTotalPrice,
fAddWayTotalPrice, i1ReturnTotalPrice, i234ReturnTotalPrice, fReturnTotalPrice,
f234AddReturnTotalPrice, totalOrderPrice, nTotalOrderPrice AS DOUBLE

ASSIGN 1 TO ferryNo

ASSIGN 0 TO noAdult, noChild, noSeCitizen, fTotalPeopleTravel,
totalQuFoodDrinks, meal, salad, fBuffet, bread, snacks, teaCoffee, fJuice, wine

ASSIGN 0.00 TO i1WayTotalPrice, i234WayTotalPrice, fWayTotalPrice,
fAddWayTotalPrice, i1ReturnTotalPrice, i234ReturnTotalPrice, fReturnTotalPrice,
fAddReturnTotalPrice, totalOrderPrice, nTotalOrderPrice

DISPLAY “Welcome to The Ferry Travelling Company!”

DISPLAY NEWLINE

DISPLAY “Please enter your destination (L – Langkawi or P – Penang): “

READ destination

DOWHILE (destination <> ‘L’ OR destination <> ‘l’ OR destination <> ‘P’ OR
destination <> ‘p’)
        DISPLAY “Sorry, there’s no such destination! “
        DISPLAY NEWLINE
        DISPLAY “Please enter your destination (L – Langkawi or P – Penang): “
        DISPLAY NEWLINE
        READ destination
ENDDO
IF (destination == ‘L’ OR destination == ‘l’)
      CALL displayLangkawiSchedule()
ELSE
        IF (destination == ‘P’ OR destination == ‘p’)
        CALL displayPenangSchedule()
         ENDIF
ENDIF
DISPLAY NEWLINE
DISPLAY “Please enter your ferry number (1 to 8): F00”
```

```
READ ferryNo
DISPLAY NEWLINE
DOWHILE (ferryNo > 8 OR ferryNo < 1)
        DISPLAY “Sorry, your ferry number is incorrect…”
        DISPLAY NEWLINE
        DISPLAY “Please re-enter your ferry number (1 to 8): F00”
        READ ferryNo
ENDDO
DISPLAY “================Please select your ferry seat
below:================ "
CALL displayFerrySeat (destination)
DISPLAY
“========================================================== “
DISPLAY NEWLINE
DISPLAY “Ferry No: F00” ferryNo NEWLINE
DISPLAY “Deck No (Upper deck – 1 or Lower Deck – 2 to 4): “
READ deckNo
DOWHILE (deckNo > 4 OR deckNo <1)
        DISPLAY “Sorry, your deck number is invalid!”
        DISPLAY NEWLINE
        DISPLAY “Deck No: “
        READ deckNO
ENDDO
DISPLAY “Seat No (1 to 10): “
READ seatNo
DOWHILE (seatNo < 1 OR seatNo > 10)
        DISPLAY “Sorry, your seat number is invalid!”
        DISPLAY NEWLINE
        DISPLAY “Seat No: “
        READ seatNo
ENDDO
DISPLAY NEWLINE
DISPLAY “ Ticket ID: F00” ferryNo “-“ deckNo “-“ seatNo ”
DISPLAY NEWLINE
 IF (destination == 'P' OR destination == 'p')
```

```
        IF (ferryPenang[ferryNo][deckNo][seatNo] == 0)
                ferryPenang[ferryNo][deckNo][seatNo] = 1
                displayFerrySeat(destination)
        ELSE
                DISPLAY NEWLINE
                DISPLAY "The seat is taken by someone!"
                DISPLAY "Please choose your seat again..."
        ENDIF
ENDIF
IF (destination == 'L' OR destination == 'l')
        IF (ferryLangkawi[ferryNo][deckNo][seatNo] == 0)
                ferryLangkawi[ferryNo][deckNo][seatNo] = 1
                displayFerrySeat(destination)
        ELSE
                DISPLAY NEWLINE
                DISPLAY "The seat is taken by someone!"
                DISPLAY "Please choose your seat again..."
        ENDIF
ENDIF
REPEAT
        DISPLAY NEWLINE
        DISPLAY “Do you want to continue to select your ferry seat? (Y/N): “
        READ selectSeat
        DOWHILE (!(selectSeat == 'Y' OR selectSeat == 'y' OR selectSeat == 'N' OR
selectSeat == 'n'))
                DISPLAY “Sorry, try again!”
                DISPLAY NEWLINE
                DISPLAY “Do you want to continue the selection of ferry seat? (Y/N): “
                READ selectSeat
        ENDDO
        IF ( selectSeat == 'Y' OR selectSeat == 'y')
                DISPLAY NEWLINE
                DISPLAY “Ferry No: F00” ferryNo
                DISPLAY “Deck No (Upper Deck - 1 or Lower Deck - 2 to 4): "
```

```
READ deckNo
DOWHILE (deckNo > 4 OR deckNo < 1)
        DISPLAY “Sorry, your deck number is invalid!”
        DISPLAY NEWLINE
        DISPLAY “Deck No: “
        READ deckNo
ENDDO
DISPLAY “Seat No (1 to 10): “
READ seatNo
DOWHILE (seatNo < 1 OR seatNo > 10)
        DISPLAY “Sorry, your seat number is invalid!”
        DISPLAY NEWLINE
        DISPLAY “Seat No: “
        READ seatNo
ENDDO
IF (destination == 'P' OR destination == 'p')
        IF (ferryPenang[ferryNo][deckNo][seatNo] == 0)
                ferryPenang[ferryNo][deckNo][seatNo] = 1
                displayFerrySeat(destination)
        ELSE
                DISPLAY NEWLINE
                DISPLAY "The seat is taken by someone!"
                DISPLAY "Please choose your seat again..."
        ENDIF
ENDIF
IF (destination == 'L' OR destination == 'l')
        IF (ferryLangkawi[ferryNo][deckNo][seatNo] == 0)
                ferryLangkawi[ferryNo][deckNo][seatNo] = 1
                displayFerrySeat(destination)
        ELSE
                DISPLAY NEWLINE
                DISPLAY "The seat is taken by someone!"
                DISPLAY "Please choose your seat again..."
        ENDIF
```

```
                ENDIF
                DISPLAY NEWLINE
                DISPLAY " Ticket ID: F00" ferryNo "-" deckNo "-" seatNo "
        ELSE
                IF (selectSeat == 'N' OR selectSeat == 'n')
                        DISPLAY "Please continue your process…"
                        DISPLAY NEWLINE
                ENDIF
        ENDIF
UNTIL (selectSeat == 'Y' OR selectSeat == 'y')
DISPLAY NEWLINE
DISPLAY "Please enter your ferry ticket's entry (One way - 1 or Return - 2): "
READ ticketEntry
DISPLAY NEWLINE
DOWHILE (!(ticketEntry == 1 OR ticketEntry == 2))
        DISPLAY "Sorry, try again!"
        DISPLAY NEWLINE
        DISPLAY "Please re-enter your ferry ticket's entry (One way - 1 or Return - 2):
"
        READ ticketEntry
ENDDO
DISPLAY NEWLINE
IF (ticketEntry == 1)
        CALL oWayTicketPrice()
        CALL oneWayFamilyPackage()
ELSE
        IF (ticketEntry == 2)
                CALL returnTicketPrice()
                CALL returnFamilyPackage()
        ENDIF
ENDIF
DISPLAY NEWLINE
DISPLAY "Please select your ticket (Individual - I or Family Package - F): "
READ ticket
```

```
DISPLAY NEWLINE
IF (ticket == 'I' OR ticket == 'i')
        CALL selectTicket()
ELSE
        IF (ticket == 'F' OR ticket == 'f')
                DISPLAY "Are there any adult? (Y/N): Y"
                DISPLAY "Please enter the number of adult: 2"
                DISPLAY NEWLINE
                DISPLAY "Are there any senior citizen? (Y/N): N"
                DISPLAY "Please enter the number of senior citizen: 0"
                DISPLAY NEWLINE
                DISPLAY "Are there any child? (Y/N): Y"
                DISPLAY "Please enter the number of child: 2"
                DISPLAY NEWLINE
                DISPLAY "Do you need to add any ticket? (Y/N): "
                READ addTicket
                DISPLAY NEWLINE
                IF (addTicket == 'Y' OR addTicket == 'y')
                        DISPLAY "Please enter the addition of adult: "
                        READ noAdult
                        DISPLAY NEWLINE
                        DISPLAY "Please enter the addition of senior citizen: "
                        READ noSeCitizen
                        DISPLAY NEWLINE
                        DISPLAY "Please enter the addition of child: "
                        READ noChild
                ELSE
                        IF (addTicket == 'N' OR addTicket == 'n')
                                DISPLAY “There’s no added any ticket!”
                        ENDIF
                ENDIF
                DISPLAY "Total number of people travelled: "
                IF ((ticket == 'F' || ticket == 'f') AND (addTicket == 'Y' OR addTicket ==
'y'))
```

```
                fTotalPeopleTravel = noAdult + noSeCitizen + noChild + 4
                DISPLAY fTotalPeopleTravel
            ELSE
                IF (ticket == 'F' OR ticket == 'f')
                    DISPLAY 4
                ENDIF
            ENDIF
        ENDIF
ENDIF
DISPLAY NEWLINE
DISPLAY "Total ticket's price: "
IF ((ticketEntry == 1) AND (ticket == 'I' OR ticket == 'i') AND (deckNo == 1))
        i1WayTotalPrice = noAdult * 80 + noSeCitizen * 65 + noChild * 65
        DISPLAY "RM" i1WayTotalPrice ".00"
ELSE
        IF ((ticketEntry == 1) AND (ticket == 'I' OR ticket == 'i') AND (deckNo == 2 OR
deckNo == 3 OR deckNo == 4))
            i234WayTotalPrice = noAdult * 60 + noSeCitizen * 45 + noChild * 45
            DISPLAY "RM" i234WayTotalPrice ".00"
        ELSE
            IF ((ticketEntry == 1) AND (ticket == 'F' OR ticket == 'f'))
                fWayTotalPrice = 195
                DISPLAY "RM" fWayTotalPrice ".00"
            ELSE
                IF ((ticketEntry == 1) AND (ticket == 'F' OR ticket == 'f') AND
            (deckNo == 2 OR deckNo == 3 OR deckNo == 4))
                    fAddWayTotalPrice = noAdult * 60 + noSeCitizen * 45 +
                noChild * 45 + 195
                    DISPLAY "RM" fAddWayTotalPrice ".00"
                ELSE
                    IF ((ticketEntry == 2) AND (ticket == 'I' OR ticket == 'i')
                AND (deckNo == 1))
                        i1ReturnTotalPrice = noAdult * 150 + noSeCitizen
                    * 120 + noChild * 120
                        DISPLAY "RM" i1ReturnTotalPrice ".00"
                    ELSE
```

```
                    IF ((ticketEntry == 2) AND (ticket == 'I' OR ticket
                == 'i') AND (deckNo == 2 OR deckNo == 3 OR deckNo
                == 4))
                        i234ReturnTotalPrice = noAdult * 110 +
noSeCitizen * 80 + noChild * 80
                        DISPLAY "RM" i234ReturnTotalPrice ".00"
                    ELSE
                        IF ((ticketEntry == 2) AND (ticket == 'F' OR
                    ticket == 'f'))
                            fReturnTotalPrice = 365
                            DISPLAY "RM" fReturnTotalPrice
".00"
                        ELSE
                            IF ((ticketEntry == 2) AND (ticket ==
                        'F' OR ticket == 'f') AND (deckNo == 2 OR
                        deckNo == 3 OR deckNo == 4))
                                f234AddReturnTotalPrice =
                            noAdult * 110 + noSeCitizen * 80 +
                            noChild * 80 + 365
                                DISPLAY "RM"
                            f234AddReturnTotalPrice ".00"
                            ENDIF
                        ENDIF
                    ENDIF
                ENDIF
            ENDIF
        ENDIF
    ENDIF
ENDIF
DISPLAY NEWLINE
DISPLAY “Do you need any food or drinks? (Y/N)”
READ foodDrinks
DISPLAY NEWLINE
IF (if (foodDrinks == 'Y' OR foodDrinks == 'y')
    CALL foodAndDrinksMenu
    DISPLAY  TAB TAB TAB “ Quantity “
    DISPLAY “Meal(per combo) “ TAB
```

```
        READ meal
        DISPLAY “Salad “ TAB TAB TAB
        READ salad
        DISPLAY “Fruit Buffet ” TAB TAB
        READ fBuffet
        DISPLAY “Bread “ TAB TAB TAB
        READ bread
        DISPLAY “Snacks(each) “ TAB TAB
        READ snacks
        DISPLAY “Tea/Coffee “ TAB TAB
        READ teaCoffee
        DISPLAY “Fruit Juice “ TAB TAB
        READ fJuice
        DISPLAY “Wine(souvenir) “ TAB
        READ wine
ELSE
        IF (foodDrinks == 'N' OR foodDrinks == 'n')
                DISPLAY "There's no added food and drinks!"
        ENDIF
ENDIF
DISPLAY NEWLINE
DISPLAY "Total ordered of food & drinks: "
IF (foodDrinks == 'Y' OR foodDrinks == 'y')
        totalQuFoodDrinks = meal + salad + fBuffet + bread + snacks + teaCoffee +
fJuice + wine
        DISPLAY totalQuFoodDrinks
ELSE
        IF (foodDrinks == 'N' OR foodDrinks == 'n')
                DISPLAY "0"
        ENDIF
ENDIF
DISPLAY "Total price of food & drinks ordered: "
IF (foodDrinks == 'Y' OR foodDrinks == 'y')
        totalOrderPrice = meal * 17 + salad * 12 + fBuffet * 12 + bread * 5 + snacks *
10 + teaCoffee * 5 + fJuice * 10 + wine * 125
```

```
        DISPLAY "RM" totalOrderPrice ".00"
ELSE
        IF (foodDrinks == 'N' OR foodDrinks == 'n')
                DISPLAY nTotalOrderPrice
        ENDIF
ENDIF
DISPLAY “Overall payment: ”
IF ((ticketEntry == 1) AND (ticket == 'I' OR ticket == 'i') AND (deckNo == 1))
        overallPay1 = i1WayTotalPrice + totalOrderPrice
        DISPLAY "RM" overallPay1 ".00"
ELSE
        IF((ticketEntry == 1) AND (ticket == 'I' OR ticket == 'i') AND (deckNo == 2 OR
deckNo == 3 OR deckNo == 4))
                overallPay2 = i234WayTotalPrice + totalOrderPrice
                DISPLAY "RM" overallPay2 ".00"
        ELSE
                IF((ticketEntry == 1) AND (ticket == 'F' OR ticket == 'f'))
                        overallPay3 = fWayTotalPrice + totalOrderPrice
                        DISPLAY “RM” overallPay3 ".00"
                ELSE
                        IF ((ticketEntry == 1) AND (ticket == 'F' OR ticket == 'f') AND
                (deckNo == 2 OR deckNo == 3 OR deckNo == 4))
                                overallPay4 = fAddWayTotalPrice + totalOrderPrice
                                DISPLAY "RM" overallPay4 ".00"
                        ELSE
                                IF ((ticketEntry == 2) AND (ticket == 'I' OR ticket == 'i')
                        AND (deckNo == 1))
                                        overallPay5 = i1ReturnTotalPrice + totalOrderPrice
                                        DISPLAY "RM" overallPay5 ".00"
                                ELSE
                                        IF ((ticketEntry == 2) AND (ticket == 'I' OR ticket
                                == 'i') AND (deckNo == 2 OR deckNo == 3 OR deckNo
                                == 4))
                                                overallPay6 = i234ReturnTotalPrice +
totalOrderPrice
                                                DISPLAY "RM" overallPay6 ".00"
```

```
                                        ELSE
                                            IF ((ticketEntry == 2) AND (ticket == 'F' OR
                                        ticket == 'f'))
                                                overallPay7 = fReturnTotalPrice +
totalOrderPrice
                                                DISPLAY “RM” overallPay7 “.00”
                                            ELSE
                                                IF ((ticketEntry == 2) AND (ticket ==
                                            'F' OR ticket == 'f') AND (deckNo == 2 OR
                                            deckNo == 3 OR deckNo == 4))
                                                    overallPay8 =
f234AddReturnTotalPrice + totalOrderPrice
                                                    DISPLAY "RM" overallPay8
".00"
                                                ENDIF
                                            ENDIF
                                        ENDIF
                                    ENDIF
                                ENDIF
                            ENDIF
                        ENDIF
                    ENDIF
                ENDIF
            ENDIF
        ENDIF
    ENDIF
    REPEAT
        DISPLAY "--------------------Ferry Ticket-----------------"
        DISPLAY TAB “ Welcome to Ferry Travelling Company! “ TAB
        DISPLAY NEWLINE
        DISPLAY TAB TAB “ Ticket ID: F00” ferryNo "-" deckNo "-" seatNo
        DISPLAY NEWLINE
        DISPLAY "Destination: "
        IF (destination == 'L' OR destination == 'l')
            DISPLAY "LANGKAWI"
        ELSE
            IF (destination == 'P' OR destination == 'p')
                DISPLAY "PENANG"
            ENDIF
        ENDIF
```

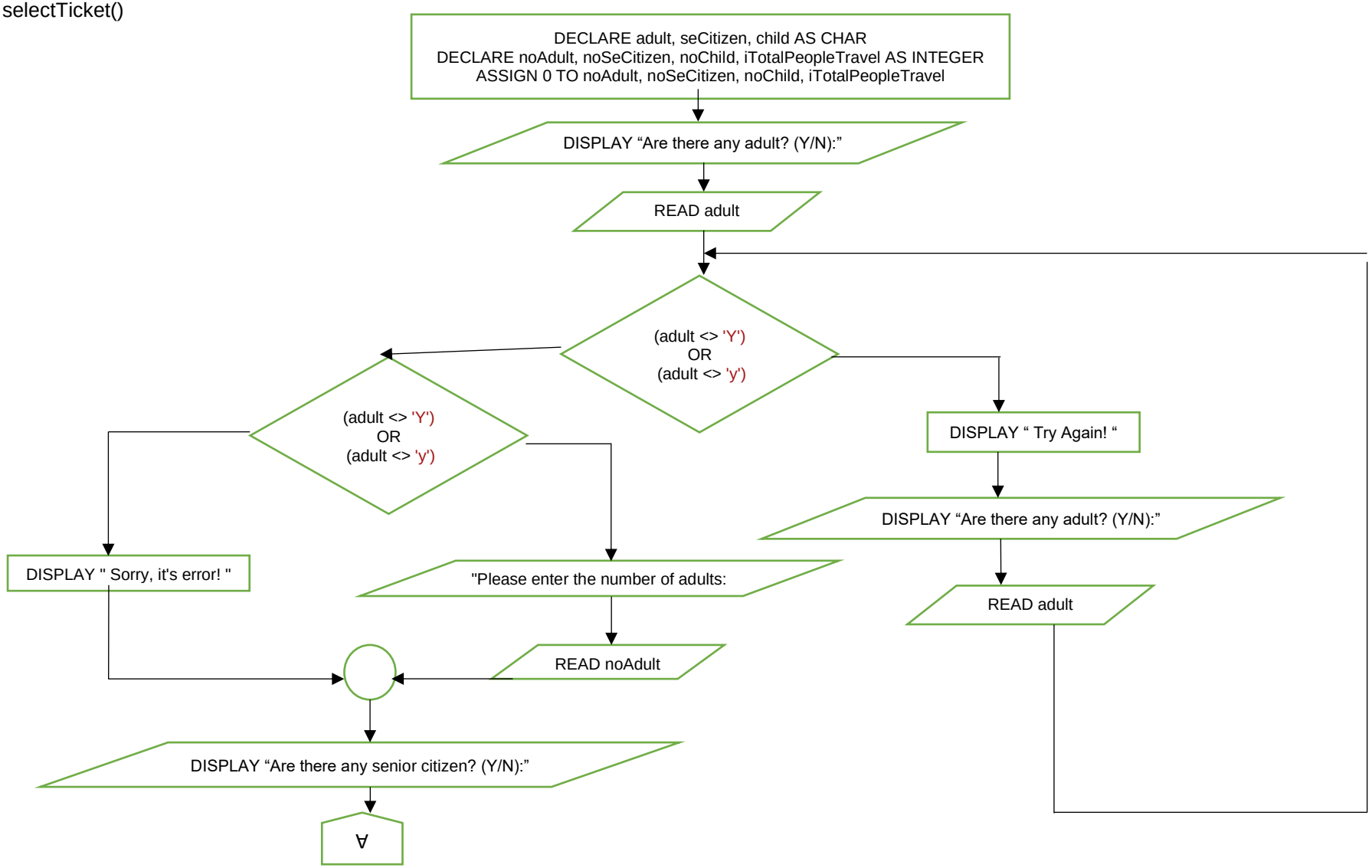
```
        DISPLAY "Food & Drinks? :"
        IF (foodDrinks == 'Y' OR foodDrinks == 'y')
                DISPLAY "YES"
        ELSE
                IF (foodDrinks == 'N' OR foodDrinks == 'n')
                        DISPLAY "No"
                ENDIF
        ENDIF
        DISPLAY NEWLINE
        DISPLAY TAB TAB "Hope You Enjoy Your trip!" TAB TAB
        DISPLAY "-----------------------------------------------"
UNTIL (selectSeat == 'Y' OR selectSeat == 'y')
END


FUNCTION

displayLangkawiSchedule()
        DECLARE pFerryNo, dTime, aTime AS INTEGER
        ASSIGN 1 TO pFerryNo
        ASSIGN 7 TO dTime
        ASSIGN 9 TO aTime
        DISPLAY TAB " Langkawi Time Schedules " NEWLINE
        DISPLAY "From: " TAB "PENANG   ||   To:" TAB "LANGKAWI" NEWLINE
        DISPLAY "Ferry No      Departure Time      Arrival Time      " NEWLINE
        DOWHILE (pFerryNo <= 8)
                DISPLAY "F00" pFerryNo TAB dTime ":00" TAB aTime ":00" NEWLINE
                pFerryNo++
                dTime += 2
                aTime += 2
        ENDDO

displayPenangSchedule()
        DECLARE lFerryNo, dTime, aTime AS INTEGER
```

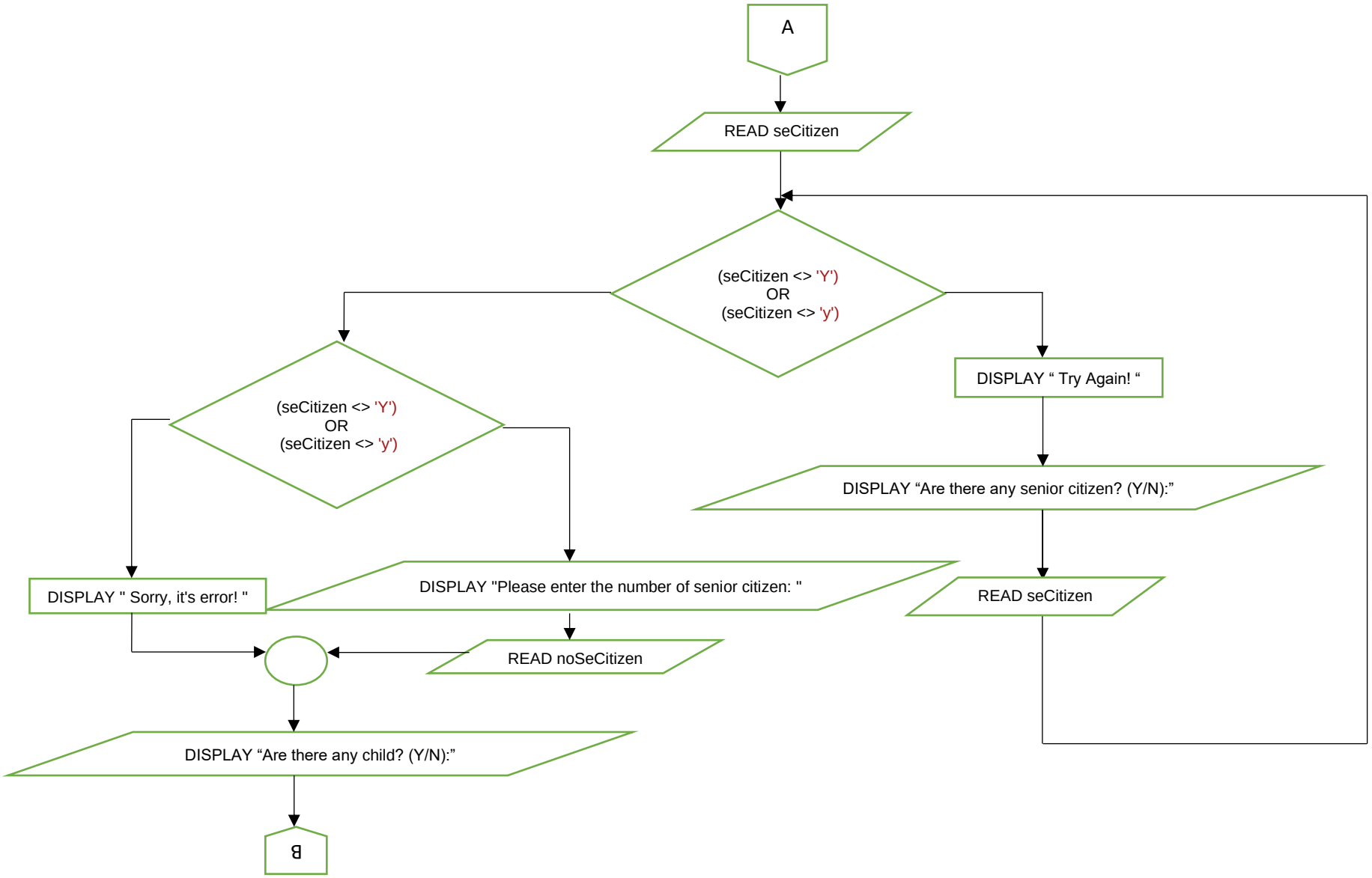
```
        ASSIGN 1 TO lFerryNo
        ASSIGN 10 TO dTime
        ASSIGN 12 TO aTime
                DISPLAY TAB " Penang Time Schedules " NEWLINE
        DISPLAY "From: " TAB "LANGKAWI   ||   To:" TAB "PENANG" NEWLINE
        DISPLAY "Ferry No      Departure Time      Arrival Time      " NEWLINE
        DISPLAY "F008" TAB "8:00" TAB "10:00" NEWLINE
        DOWHILE (lFerryNo <= 7)
                DISPLAY "F00" lFerryNo TAB dTime ":00" TAB aTime ":00" NEWLINE
                lFerryNo++
                dTime = dTime + 2
                aTime = aTime + 2
        ENDDO

displayFerrySeat(char& destination)
        DECLARE ferryPenang[9][5][11] = { 0 } AS INTEGER
        DECLARE ferryLangkawi[9][5][11] = { 0 } AS INTEGER
        DECLARE a, b, c AS INTEGER
        IF (destination == 'L' OR destination == 'l')
                LOOP a FROM 1 TO 8 STEP 1
                        DISPLAY "Ferry number: " a
                        LOOP b FROM 0 TO 4 STEP 1
                                IF (b == 0)
                                        DISPLAY "Seat number" TAB
                                ELSE
                                        DISPLAY "Deck NO " b TAB
                                ENDIF
                                LOOP C FROM 1 TO 10 STEP 1
                                        IF (b == 0)
                                                DISPLAY c TAB
                                        ELSE
                                                DISPLAY ferryLangkawi[a][b][c] TAB
                                        ENDIF
                                ENDLOOP
```

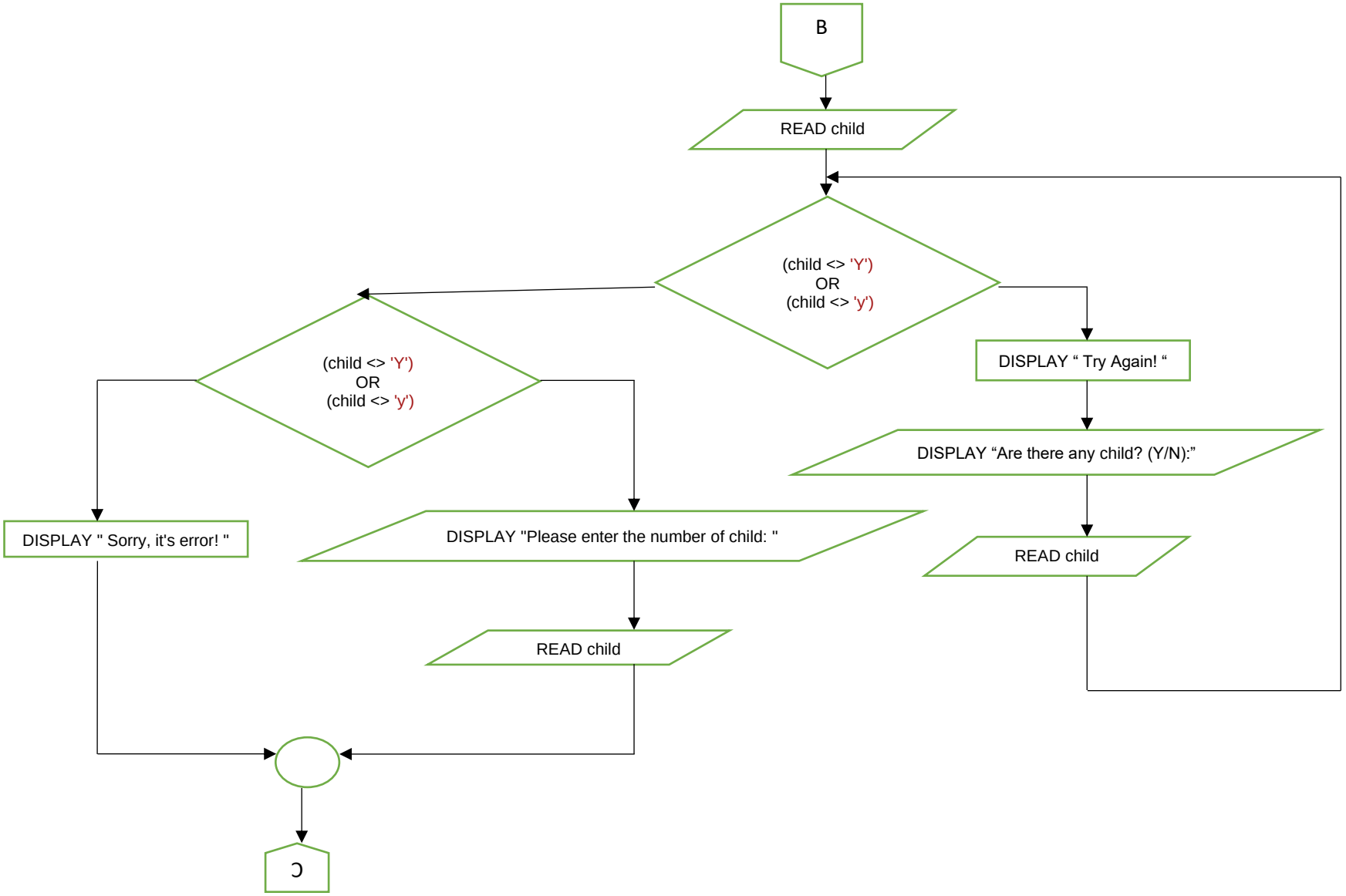
```
                    DISPLAY NEWLINE
                ENDLOOP
                DISPLAY NEWLINE
            ENDLOOP
        ELSE

IF (destination == 'P' OR destination == 'p')
                LOOP a FROM 1 TO 8 STEP 1
                    DISPLAY "Ferry number: " a
                    LOOP b FROM 0 TO 4 STEP 1
                        IF (b == 0)
                            DISPLAY "Seat number" TAB
                        else
                            DISPLAY "Deck NO " b TAB
                        ENDIF
                        LOOP c FROM 1 TO 10 STEP 1
                            IF (b == 0)
                                DISPLAY c TAB
                            ELSE
                                DISPLAY ferryPenang[a][b][c] TAB
                            ENDIF
                        ENDLOOP
                        DISPLAY NEWLINE
                    ENDLOOP
                    DISPLAY NEWLINE
                ENDLOOP
            ENDIF
        ENDIF


oWayTicketPrice()
        DISPLAY "-------------------------One Way Ferry Ticket-------------------------"
        DISPLAY TAB TAB " Adult  TAB Senior Citizen   TAB Child"
        DISPLAY TAB TAB TAB  "  (above 60 yesrs old)  (3 - 11 years old)"
```

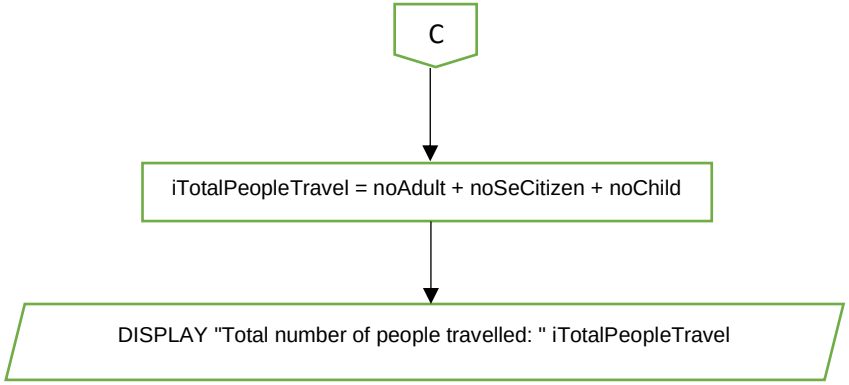
```
        DISPLAY "Upper Deck TAB RM 80.00 TAB   RM 65.00  TAB TAB RM 65.00"
        DISPLAY "Lower Deck TAB RM 60.00 TAB   RM 45.00  TAB TAB RM 45.00"
        DISPLAY "-------------------------------------------------------------------------------"

returnTicketPrice()
        DISPLAY "--------------------------Return Ferry Ticket-------------------------"
        DISPLAY TAB TAB " Adult   TAB Senior Citizen   TAB Child"
        DISPLAY TAB TAB TAB "   (above 60 yesrs old)  (3 - 11 years old)"
        DISPLAY "Upper Deck TAB RM 150.00 TAB   RM 120.00  TAB TAB RM
120.00"
        DISPLAY "Lower Deck TAB RM 110.00 TAB   RM 80.00   TAB TAB RM
80.00"
        DISPLAY "-------------------------------------------------------------------------------"

oneWayFamilyPackage()
        DISPLAY "--------Family Package (2 Adults + 2 Childs)-------"
        DISPLAY TAB TAB TAB " Return Tickets "
        DISPLAY "Upper Deck" TAB TAB "-"
        DISPLAY "Lower Deck" TAB TAB  "RM 365.00"
        DISPLAY "-----------------------------------------------------------------"

foodAndDrinksMenu()
        DISPLAY "-------------Food & Drinks Menu-----------"
        DISPLAY TAB TAB TAB " Prices "
        DISPLAY "Meal(per combo)" TAB "RM 17.00"
        DISPLAY "Salad" TAB TAB TAB "RM 12.00"
        DISPLAY "Fruit Buffet" TAB TAB "RM 12.00"
        DISPLAY "Bread" TAB TAB TAB "RM 5.00"
        DISPLAY "Snacks(each)" TAB TAB "RM 10.00"
        DISPLAY "Tea/Coffee" TAB TAB "RM 5.00"
        DISPLAY "Fruit Juice" TAB TAB "RM 10.00"
        DISPLAY "Wine(souvenir)" TAB "RM 125.00"
        DISPLAY "-------------------------------------------------"
```

selectTicket()




A
READ seCitizen
(seCitizen <> 'Y')
OR
(seCitizen <> 'y')
DISPLAY " Try Again! "
DISPLAY "Are there any senior citizen? (Y/N):"
READ seCitizen
(seCitizen <> 'Y')
OR
(seCitizen <> 'y')
DISPLAY " Sorry, it's error! "
DISPLAY "Please enter the number of senior citizen: "
READ noSeCitizen
DISPLAY "Are there any child? (Y/N):"
B


B
READ child
(child <> 'Y')
OR
(child <> 'y')
DISPLAY " Try Again! "
DISPLAY "Are there any child? (Y/N):"
READ child
(child <> 'Y')
OR
(child <> 'y')
DISPLAY " Sorry, it's error! "
DISPLAY "Please enter the number of child: "
READ child
C


C
iTotalPeopleTravel = noAdult + noSeCitizen + noChild
DISPLAY "Total number of people travelled: " iTotalPeopleTravel

Ferry Time-Schedules

Eight ferry a day.

Note: A ferry departing from Penang every 2 hours from 7 am to 9 pm.

Last ferry of the day on 9:00pm.

ORIGIN: PENANG		DESTINATION: LANGKAWI
FERRY NO	DEPARTURE TIME	ARRIVAL TIME
F001	7:00	9:00
F002	9:00	11:00
F003	11:00	13:00
F004	13:00	15:00
F005	15:00	17:00
F006	17:00	19:00
F007	19:00	21:00
F008	21:00	23:00

Note: A ferry departing from Langkawi every 2 hours from 8 am to 10 pm.

Last ferry of the day on 10:00pm.

ORIGIN: LANGKAWI		DESTINATION: PENANG
FERRY NO	DEPARTURE TIME	ARRIVAL TIME
F008	8:00	10:00
F001	10:00	12:00
F002	12:00	14:00
F003	14:00	16:00
F004	16:00	18:00
F005	18:00	20:00
F006	20:00	22:00
F007	22:00	24:00

Ferry Passenger's Seat-Arrangement

Note: Each ferry contains 2 decks – upper deck (10 passengers) & lower deck (30 passengers).

Seat No: 1 - 10

Deck No: 1 = Upper deck

2 = Lower deck 1

3 = Lower deck 2

4 = Lower deck 3

Formation of seat code on ticket (Ferry ID): F00X-X-XX (eg: F001-2-4)

*Once the ferry seat has booked, the value will change from 0 (if seat is available) to 1 (if seat is booked) *

For example: The table of ferry no: F00X below shown the ferry seats: F00X-2-03, F00X-2-08 and F00X-3-6 have already booked.

Ferry No: F00X

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	1	0	0	0	0	1	0	0
3	0	0	0	0	0	1	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

These are the ferry number for each trip where passengers could select their seat followed by their time-schedule:

Ferry No: F001

Seat NO Deck No	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F002

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F003

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F004

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F005

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F006

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F007

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

Ferry No: F008

Seat NO Deck No	1	2	3	4	5	6	7	8	9	10
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0	0	0	0	0

The table below shows how many seats still available for booking on each ferry:

Seats Available		
Ferry No	**Upper Deck (1)**	**Lower Deck (2, 3 & 4)**
F001	10	30
F002	10	30
F003	10	30
F004	10	30
F005	10	30
F006	10	30
F007	10	30
F008	10	30

The Price of the Ferry Ticket

One Way Ticket			
	Adult	**Senior Citizen (above 60 years old)**	**Child (3 – 11 years old)**
Upper Deck	RM 80.00	RM 65.00	RM 65.00
Lower Deck	RM 60.00	RM 45.00	RM 45.00

Return Ticket			
	Adult	**Senior Citizen (above 60 years old)**	**Child (3 – 11 years old)**
Upper Deck	RM 150.00	RM 120.00	RM 120.00
Lower Deck	RM 110.00	RM 80.00	RM 80.00

Family Package (2 Adults + 2 Childs)		
	One Way Ticket	**Return Ticket**
Upper Deck	**-**	**-**
Lower Deck	RM 195.00	RM 365.00

References

1. https://www.easybook.com/en-my/ferry/booking/penang-to-langkawijetty
2. https://www.travel-penang-malaysia.com/penang-langkawi-ferry.html