KOLEJ PROFESIONAL MARA BERANANG

FINALE PROJECT SESSION 3 2021/2022

PREPARED FOR:

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PUAN NOOR FAZLIANI BINTI SHAMSHUDIN

Task-To-Do:

1. Provide overview and objective of your application development.
2. Draw a visual map of theme park with locations of activities and distances among all the locations using graph.
3. Produce adjacency matrix and adjacency list that represents locations and distances for a graph in Task 1.
4. Develop an application that fulfill the requirements below:
    a) Implement linked list to calculate the tickets fee and display the fee for each location and total ticket fee.
    b) Implement graph that represent locations (vertices) and distances (edges) that map your design in Task 1 and Task 2.
5. Apply good programming practices in terms of:
    a) Flow of the system (appropriate menu)
    b) Comments
    c) Output layout
6. Include print screen of the output and the coding of your application in your report.
7. Present your application which include:
    a) Content
    b) Visual aids
    c) Verbal communication
    d) Fluency and clarity
    e) Non-verbal communication
    f) Understand and respond to questions

0.0) TABLE OF CONTENT

1.0) OVERVIEW AND OBJECTIVES

1.1) OVERVIEW

In a single day, there are a huge number of customers. In order to respond to this uncontrollable flood of customers and to provide a higher degree of efficiency to meet their needs, an application that supports the ticket purchase process and theme park information was created.

Desa Theme Park Application was made to support the ticket purchasing process and information of the theme park . In this application, It provide a main menu for user to choose their purpose before getting into the theme park . The menu have 4 main user selection to choose which consist of:

- Purchase Tickets
- Check Customer's Name
- Distance Travel
- Exit

The application for **'Purchase Tickets'** will help user to buy their desired tickets easily which their data will save in linked list code data structure . User will not only able to choose their desired tickets, but also able to get to choose many tyes of tickets and quantity per user .

Furthermore , In order to verify the customer already pay for the ticket or not, the function of **'Check Customer's Name'** was made. The application will detect the customer's name through the variable of name list . This function will detect if the customer already paid for the ticket. it will appear notification sign which EXISTED in the name list . Same goes for the customer who wasn't pay yet, the sign will show 'NOT EXISTED' .

On the other hand, the application is able to help user to calculate the **"Distance Travel'** between two location (nodes) by referring to virtual map . If user want to go from one location to another location that need to come across a few locations or have a lot of pathway, the application was already auto-setup a shortest pathway for user to go to their desired location without wasting time . This feature function will show user the total distance it takes from one location to another location that choose by user.

Last but not least, when all task that performed by user is finished , the user is allowed to **exit** from the program . When user exit from the program , the appropriate farewell and a bit quotes to appreciate the user and appear along with barcode to scan whose receipt payment for security issues .

0.1) OBJECTIVES

- **More Saves Time**

  One of the biggest objective when user using Desa Theme Park Application like is that all the hard work is automated. User even can be done in less than 10 minutes, once this is completed user can spend their time to other important matters like curating new ideas or planning other events. The application is automatically calculate the total price, total distance, auto-check user's name, easier interface and directly user's data save in database . This reduce the user headaches that come with manual to calculate physically using calculator and flipping through record book one by one, write a lot on a piece of paper for many times, queue in line to wait for turn and etc. it really saves a lot of time. User also can plan already their journey by looking at virtual map and planning on which distance travel they want to go throughout the theme park.

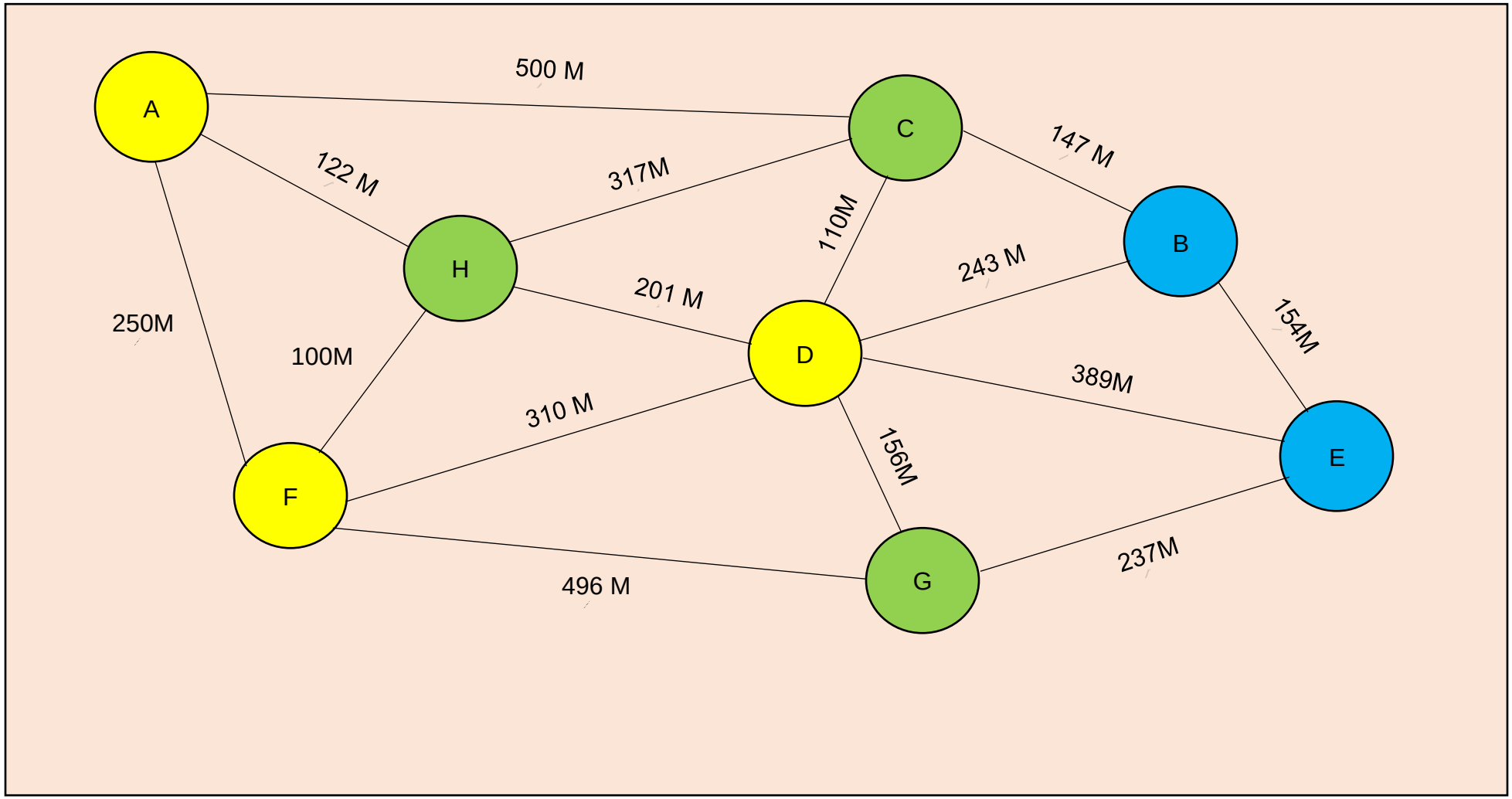
- **Make An Application Become 24/7 Accessible**

  Whilst using Desa Theme Park Application, it does give user more time to think and decide when to book for the tickets. Allowing availability at any time of day means user can purchase and book tickets at their convenience, this can help make purchases from those user who don't necessarily live near the event and might not be able to travel in order to purchase a physical copy .

- **More Secured**

  Desa Theme Park Application will check user through user payment list digitally. If user use traditional method such as pen and paper , this can be relatively slow if the person on the door has to sift through multiple pages to find the correct name, it can also become frustrating if the people in charge didn't look throughly throughout the payment list to check the user's name. , user or people in charge can quickly search for the name of user who actually already paid or not. However, there is no way to ensure that the ticket is legitimate. The final method that we recommend you use is bar code scanning. Tickets from Desa Theme Park Application come with their unique barcode after user exit from the program This will verify user who are paid and not pay yet through scanning technology . This requires the tickets code to be scanned and making it near impossible to duplicate the tickets due to unique barcode. So it will make the application more secure.

2.0) VIRTUAL MAP



NO.	NAME	LOCATION (NODE)
1.	iMagination 3D Theatre	A
2.	DESA Wave Pool	B
3.	Dragon Coaster Ride	C
4.	Zombie House ESCAPE!	D
5.	Splash 'N' Swirl Safari	E
6.	VR: Shoot The ENEMY!	F
7.	MINI Zoo Tour	G
8.	Lost Kingdom Ride	H

3.0) ADJENCY MATRIX AND ADJENCY LIST

3.1) ADJENCY MATRIX

Adjency Matrices is very helpful when user need to quickly check if the map used to associate between the graph nodes have a direct edge or not . Because, Adjacency Matrices allow users to quickly answer queries about whether a certain edge between two vertices belongs in the graph or as well as perform edge insertions and removals.

	A	B	C	D	E	F	G	H
A			500			250		122
B			147	243	154			
C	500	147		110				317
D		243	110		389	310	156	201
E		154		389			237	
F	250			310			496	100
G				156	237	496		
H	122		317	201		100		

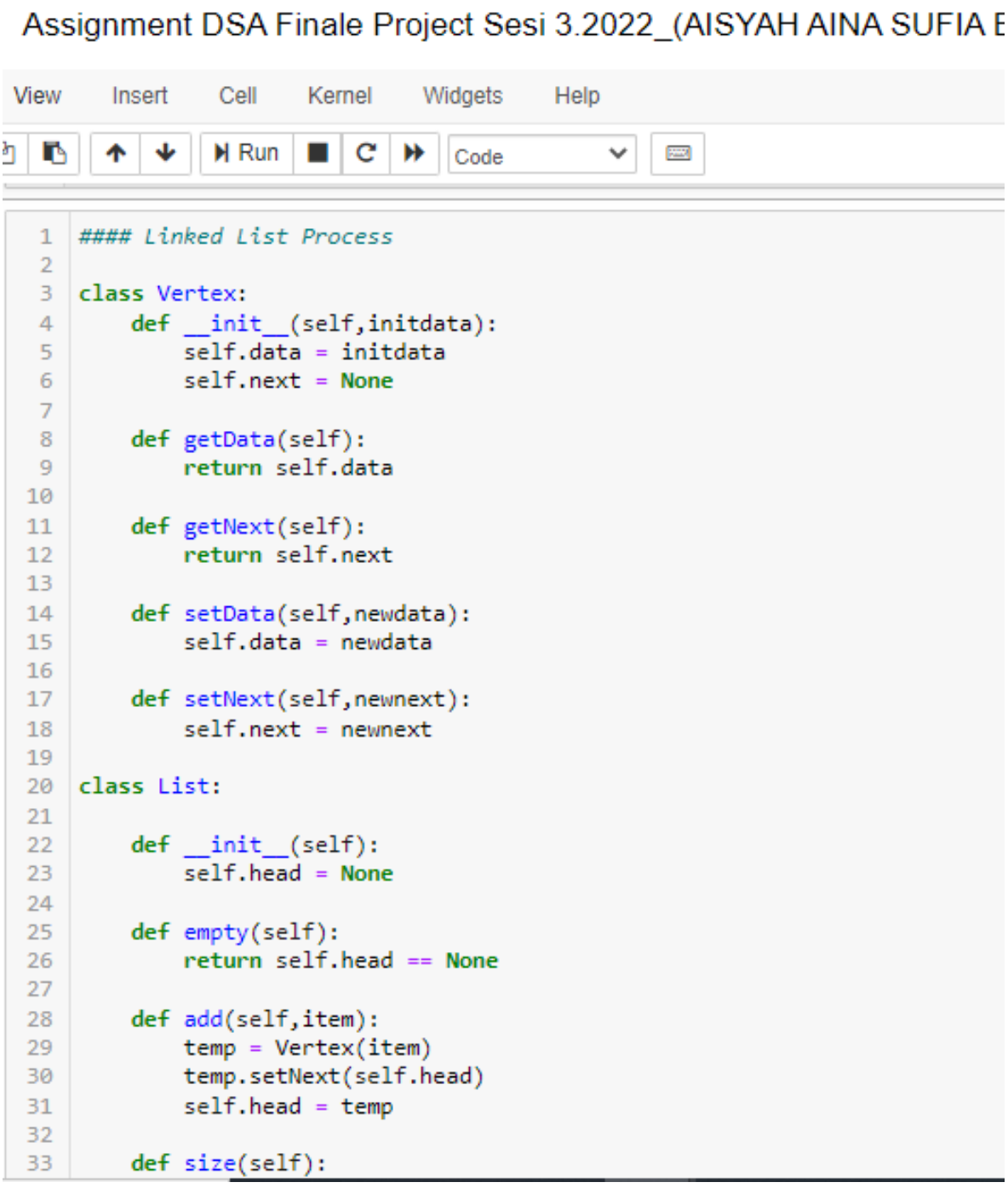
3.2) ADJENCY LIST

It enables us to portray a sparse graph in a concise manner. We can also use the adjacency list to quickly locate all of the connections that are typically linked to that particular vertex.

Vertex List		Vertex Objects
A		id = “A” Adj = {C:500, F:250 , H:122}
B		id = “B” Adj = {C:147, D:243 , E:154}
C		id = “C” Adj = {A:500, B:147 , D:110 , H: 317}
D		id = “D” Adj = {B:243 , C:110 , E:389 , F:310 , G:156 , H:201}
E		id = “E” Adj = {B:154 , D:389 , G:237}
F		id = “F” Adj = {A:250, D:310 , G:496 , H:100}
G		id = “G” Adj = {D:156 , E:237 , F:496}
H		id = “H” Adj = {A:122, C:317 , D:201 , F:100}

6.0) PRINT SCREEN OF OUTPUT AND CODING OF DEVELOP APPLICATION

6.1) The Print Screen of Coding




```
#### Linked List Process

class Vertex:
    def __init__(self,initdata):
        self.data = initdata
        self.next = None

    def getData(self):
        return self.data

    def getNext(self):
        return self.next

    def setData(self,newdata):
        self.data = newdata

    def setNext(self,newnext):
        self.next = newnext

class List:

    def __init__(self):
        self.head = None

    def empty(self):
        return self.head == None

    def add(self,item):
        temp = Vertex(item)
        temp.setNext(self.head)
        self.head = temp

    def size(self):
```

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Run Code

```
        self.head = temp

    def size(self):
        current = self.head
        count = 0

        while current != None:
            count = count + 1
            current = current.getNext()

        return count

    def search(self,item):
        current = self.head
        found = False

        while current != None and not found:
            if current.getData() == item:
                found = True
            else:
                current = current.getNext()

        return found

    def remove(self,item):
        current = self.head
        previous = None
        found = False

        while not found:
            if current.getData() == item:
                found = True
            else:
                previous = current
```

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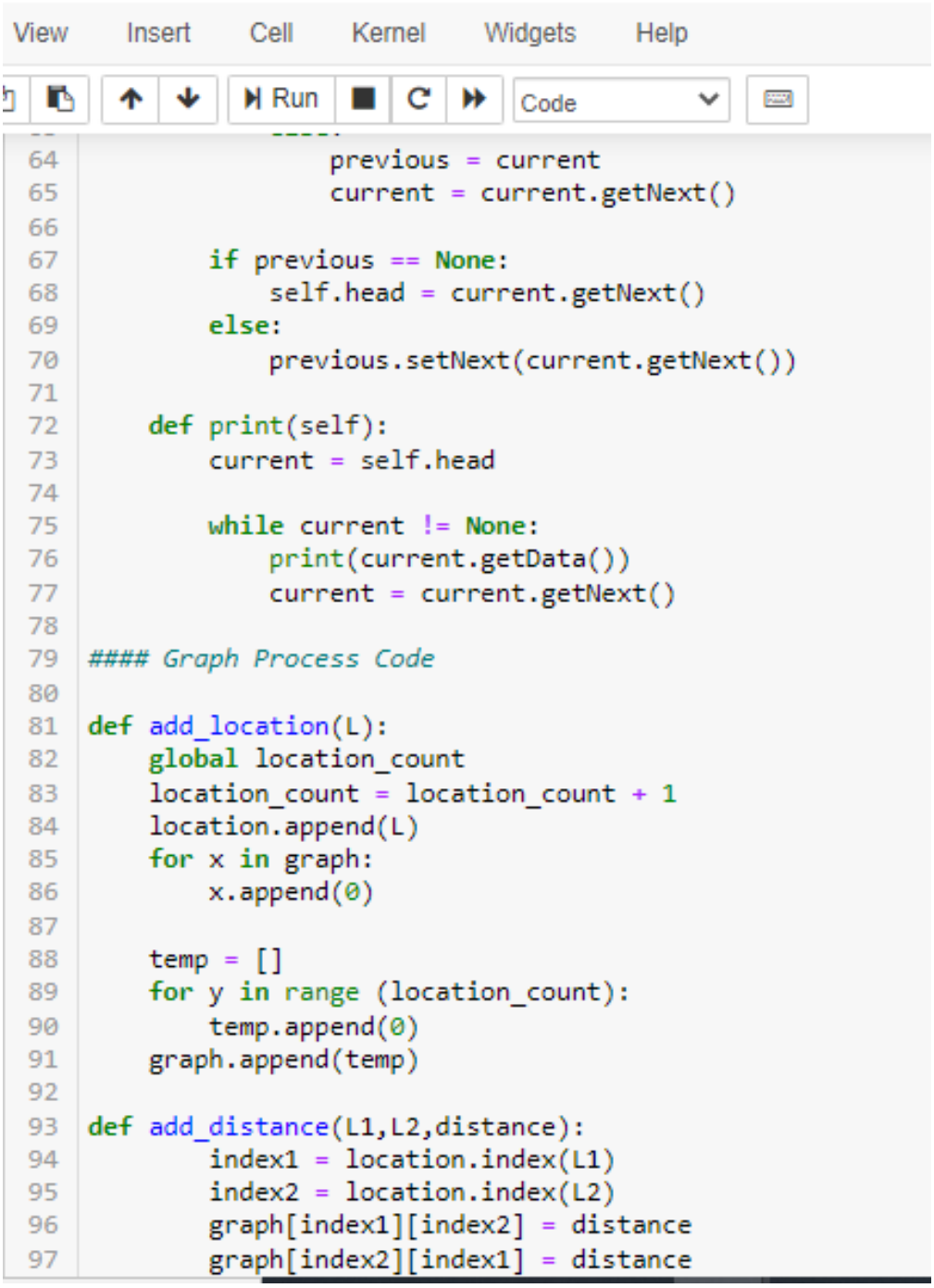


```
                previous = current
                current = current.getNext()

        if previous == None:
            self.head = current.getNext()
        else:
            previous.setNext(current.getNext())

    def print(self):
        current = self.head

        while current != None:
            print(current.getData())
            current = current.getNext()

#### Graph Process Code

def add_location(L):
    global location_count
    location_count = location_count + 1
    location.append(L)
    for x in graph:
        x.append(0)

    temp = []
    for y in range (location_count):
        temp.append(0)
    graph.append(temp)

def add_distance(L1,L2,distance):
        index1 = location.index(L1)
        index2 = location.index(L2)
        graph[index1][index2] = distance
        graph[index2][index1] = distance
```

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Run Code

```
        graph[index2][index1] = distance

def print_graph():
    for i in range (location_count):
        for j in range(location_count):
            print(format(graph[i][j],"<3"),end = " ")
        print()

def find_total_distance(L1,L2):
    return int(graph[L1][L2])

def find_distance(D):
    pos = 0

    while pos < len(location):
        if location[pos] == D:
            index = pos
        pos = pos + 1

    return index

# declare to start the program
print("Type 'start' to begin")
answer = input(":")
print()

#looping for menu
menu = 'y'

# Declare Linked List
namelist = List()
totalprice_list = List()
```

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Run Code

```
129
130
131 # Main Program (looping)
132 if answer == 'start':
133     while menu == 'y':
134
135         # appropriate greetings
136         # Main Menu
137         print("*********************************************************************************")
138         print("°☆.。.:*・°・°☆.。.\033[1m WELOCOME TO DESA THEME PARK・°☆.。.:*・°・°☆.。.:* ")
139         print("*********************************************************************************")
140         print()
141         print("HELLO WHAT CAN WE HELP YOU TODAY?")
142         print()
143         print("\u2764\uFE0F","MENU","\u2764\uFE0F")
144         print ("\n1.) PURCHASE TICKETS  \n2.) CHECK CUSTOMER'S NAME \n3.) DISTANCE TRAVEL   \n4.) EXIT ")
145         print()
146         print ("*********************************************************************************")
147
148         print()
149
150         # From User Input
151         answer = input("Your Options From Menu?(number): ")
152         print()
153
154         # User Choose option 1
155         if answer == '1':
156             print("————————————————————————————")
157             print("・。 ・。 ・。 TICKETS PURCHASE SECTION・。 ・。 ・。 ")
158             print("————————————————————————————")
159             print()
160
161             # Collection of Variable
162             other_user = 'y'
```

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Run Code

```
162             other_user = 'y'
163             while other_user == 'y':
164                 game_package = 'y'
165                 totalprice = 0
166
167                 print()
168
169                 # User Input Name
170                 name = input("Please Enter Your Name: ")
171
172                 # User input name added into the list
173                 namelist.add(name)
174
175                 print()
176
177                 # User Input Age
178                 age = int(input("Please Enter Your Age: "))
179                 date = input("Date of Booking Your Tickets: ")
180                 print()
181
182                 #Kids Price Menu
183                 if age <= 12:
184                     # Looping for kids game options
185                     while game_package == 'y':
186                         print("Hello",name,"!"," Now Please Choose Your Game Tickets ")
187                         print("———————————————————— KIDS PACKAGE ————————————————————— ")
188                         print()
189                         print("    NAME                        PACKAGE              PRICE")
190                         print()
191                         print("iMagination 3D Theatre            A                RM3.00/each")
192                         print("DESA Wave Pool                    B                RM2.00/each")
193                         print("Dragon Coaster Ride               C                RM5.10/each")
194                         print("Zombie House ESCAPE!              D                RM4.00/each")
195                         print("Splash 'N' Swirl Safari           E                RM2.50/each")
```

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Run Code

```
print("Zombie House ESCAPE!                D                RM4.00/each")
print("Splash 'N' Swirl Safari            E                RM2.50/each")
print("VR: Shoot That ENEMY!              F                RM5.30/each")
print("MINI Zoo Tour                      G                RM1.60/each")
print("Lost Kingdom Ride                  H                RM3.50/each")
print()

# user Input : Package Selection
package = input("Choose Your Package: ")
package = package.capitalize()
print()

# Price & total Calculation for each package
if package == 'A':
    qty = int(input("Quantity of Tickets?: "))
    price = 3 * qty
    totalprice = totalprice + price
    print("'iMagination 3D Theatre' Has Added To Cart")
    print("————————————————————————————————————————————————————————")
    print("Price Package A: RM",price)
    print("Total Current Price: RM",totalprice)
    print("————————————————————————————————————————————————————————")
    print()

elif package == 'B':
    qty = int(input("Quantity of Tickets?: "))
    price = 2 * qty
    totalprice = totalprice + price
    print("'DESA Wave Pool' Has Added To Cart!")
    print("————————————————————————————————————————————————————————")
    print("Price Package B: RM",price)
    print("Total Current Price: RM",totalprice)
    print("————————————————————————————————————————————————————————")
    print()
```

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Run Code

```
                print()

            elif package == 'C':
                qty = int(input("Quantity of Tickets?: "))
                price = 5.10 * qty
                totalprice = totalprice + price
                print("'Dragon Coaster Ride'Has Added To Cart!")
                print("————————————————————————————————————————————————————————————")
                print("Price Package C: RM",price)
                print("Total Current Price: RM",totalprice)
                print("————————————————————————————————————————————————————————————")
                print()

            elif package == 'D':
                qty = int(input("Quantity of Tickets?: "))
                price = 4 * qty
                totalprice = totalprice + price
                print("'Zombie House ESCAPE!'Has Added To Cart!")
                print("————————————————————————————————————————————————————————————")
                print("Price of Package D: RM",price)
                print("Total Current price: RM",totalprice)
                print("————————————————————————————————————————————————————————————")
                print()

            elif package == 'E':
                qty = int(input("Quantity of Tickets?: "))
                price = 2.50 * qty
                totalprice = totalprice + price
                print("'Splash 'N' Swirl Safari' Has Added To Cart!")
                print("————————————————————————————————————————————————————————————")
                print("Price of Package E: RM",price)
                print("Total Current Price: RM",totalprice)
                print("————————————————————————————————————————————————————————————")
                print()
```

Insert Cell Kernel Widgets Help

Run Code

```
elif package == 'F':
    qty = int(input("Quantity of Tickets?: "))
    price = 5.30 * qty
    totalprice = totalprice + price
    print("'VR:Shoot That ENEMY!'Has Added To Cart!")
    print("-------------------------------------------------------------")
    print("Price of Package F: RM",price)
    print("Total Current Payment: RM",totalprice)
    print("-------------------------------------------------------------")
    print()

elif package == 'G':
    qty = int(input("Quantity of Tickets?: "))
    price = 1.60 * qty
    totalprice = totalprice + 1.60
    print("'MINI Zoo Tour' Has Added To Cart!")
    print("-------------------------------------------------------------")
    print("Price: RM",price)
    print("Total payment: RM",totalprice)
    print("-------------------------------------------------------------")
    print()

elif package == 'H':
    qty = int(input("Quantity of Tickets?: "))
    price = 3.50 * qty
    totalprice = totalprice + price
    print("'Lost Kingdom Ride' Has Added To Cart!")
    print("-------------------------------------------------------------")
    print("Price of package H: RM",price)
    print("Total Current Price: RM",totalprice)
    print("-------------------------------------------------------------")
    print()
```

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Run Code

```
294
295                         else:
296                             print("Invalid Package! Try again. ")
297                             print()
298
299                         # Looping For Other Package Selection For Kids
300                         print()
301                         game_package = input("Add More Another Package?(y/n): ")
302                         print()
303
304                     # Add Data TotalPrice Into list
305                     totalprice_list.add(totalprice)
306
307                 else:
308                     # Looping for Adult Package
309                     while game_package == 'y':
310                         print("Hello",name,"!","Please Choose Your Game Tickets ")
311                         print("———————————————————— ADULT PACKAGE ———————————————————— ")
312                         print()
313                         print("    NAME                          PACKAGE              PRICE")
314                         print()
315                         print("iMagination 3D Theatre              A                RM5.00/each")
316                         print("DESA Wave Pool                      B                RM4.75/each")
317                         print("Dragon Coaster Ride                 C                RM8.10/each")
318                         print("Zombie House ESCAPE!                D                RM5.30/each")
319                         print("Splash 'N' Swirl Safari             E                RM7.45/each")
320                         print("VR: Shoot That ENEMY!               F                RM10.31/each")
321                         print("MINI Zoo Tour                       G                RM3.65/each")
322                         print("Lost Kingdom Ride                   H                RM6.50/each")
323                         print()
324
325                         #user input for adult package
326                         package = input("Choose Your Package: ")
327                         package = package.capitalize()
```

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un Code

```
    package = package.capitalize()
    print()

    # Activity calculation
    if package == 'A':
        qty = int(input("How Many Tickets?: "))
        price = 5 * qty
        totalprice = totalprice + price
        print("'iMagination 3D Theatre' Has Added To Cart!")
        print("--------------------------------------------------------------")
        print("Price of Package A: RM", price)
        print("Total Current Price: RM",totalprice)
        print("--------------------------------------------------------------")
        print()

    elif package == 'B':
        qty = int(input("How Many Tickets?: "))
        price = 4.75 * qty
        totalprice = totalprice + price
        print("'DESA Wave Pool' Has Added To Cart!")
        print("--------------------------------------------------------------")
        print("Price of Package B: RM",price)
        print("Total Current Price: RM",totalprice)
        print("--------------------------------------------------------------")
        print()

    elif package == 'C':
        qty = int(input("Quantity of Tickets?: "))
        price = 8.10 * qty
        totalprice = totalprice + price
        print("'Dragon Coaster Ride' Has Added To Cart!")
        print("--------------------------------------------------------------")
        print("Total Price Package C: RM",price)
        print("Total Current Price: RM",totalprice)
```

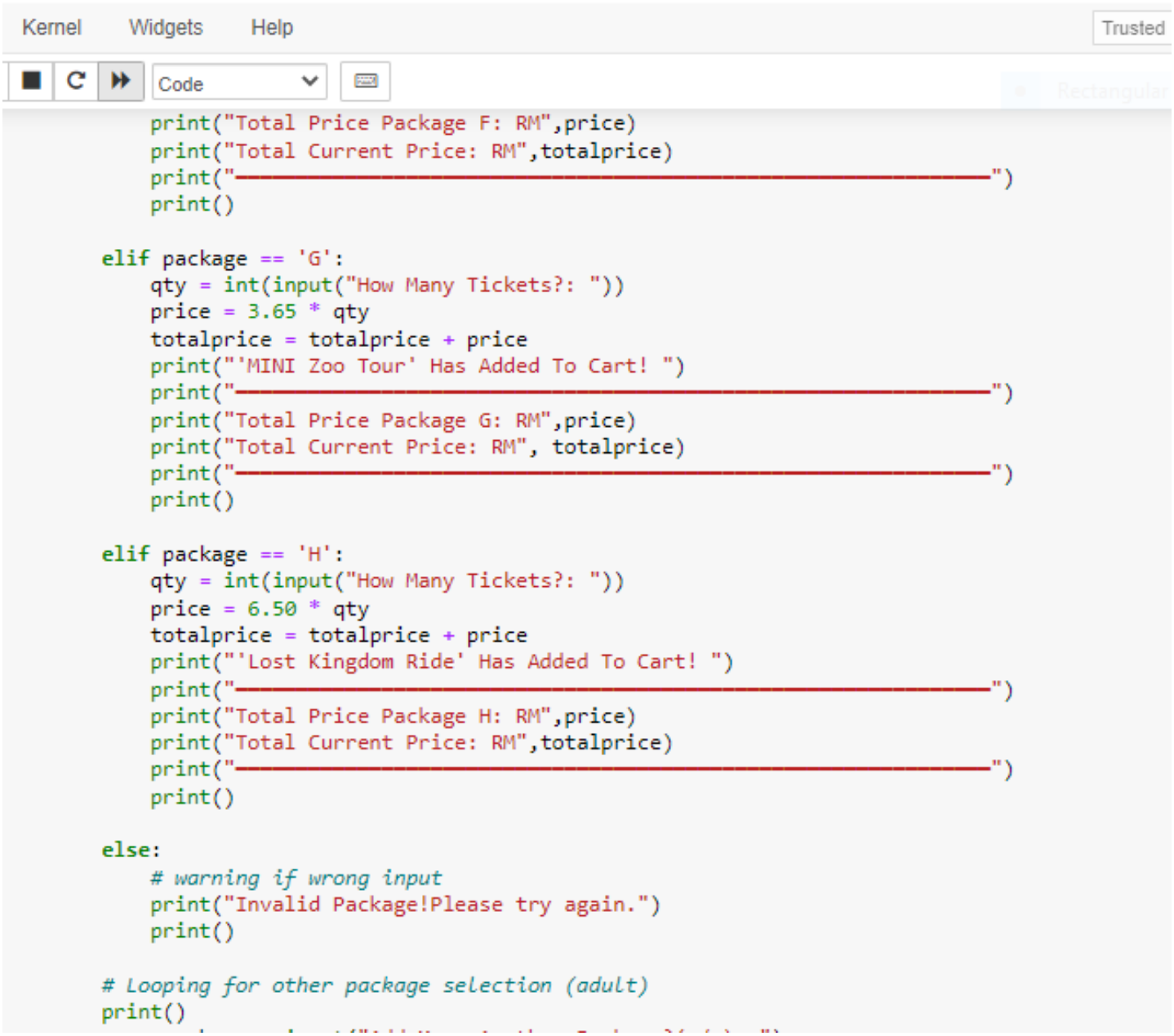
Code

```
        print("Total Price Package C: RM",price)
        print("Total Current Price: RM",totalprice)
        print("————————————————————————————————————————————————————————")
        print()

    elif package == 'D':
        qty = int(input("How Many Tickets?: "))
        price = 5.30 * qty
        totalprice = totalprice + price
        print("'Zombie House ESCAPE!'Has Added To Cart! ")
        print("————————————————————————————————————————————————————————")
        print("Total Price Package D: RM",price)
        print("Total Current Price: RM",totalprice)
        print("————————————————————————————————————————————————————————")
        print()

    elif package == 'E':
        qty = int(input("How Many Tickets?: "))
        price = 7.45 * qty
        totalprice = totalprice + price
        print("'Splash 'N' Swirl' Has Added To Cart! ")
        print("————————————————————————————————————————————————————————")
        print("Total Price Package E: RM",price)
        print("Total Current Price: RM",totalprice)
        print("————————————————————————————————————————————————————————")
        print()

    elif package == 'F':
        qty = int(input("How Many Tickets?: "))
        price = 10.31 * qty
        totalprice = totalprice + price
        print("'VR:Shoot That ENEMY!' Has Added To Cart! ")
        print("————————————————————————————————————————————————————————")
        print("Total Price Package F: RM",price)
```


Kernel
Widgets
Help
Trusted
Code
print("Total Price Package F: RM",price)
print("Total Current Price: RM",totalprice)
print("----------")
print()
elif package == 'G':
qty = int(input("How Many Tickets?: "))
price = 3.65 * qty
totalprice = totalprice + price
print("'MINI Zoo Tour' Has Added To Cart! ")
print("----------")
print("Total Price Package G: RM",price)
print("Total Current Price: RM", totalprice)
print("----------")
print()
elif package == 'H':
qty = int(input("How Many Tickets?: "))
price = 6.50 * qty
totalprice = totalprice + price
print("'Lost Kingdom Ride' Has Added To Cart! ")
print("----------")
print("Total Price Package H: RM",price)
print("Total Current Price: RM",totalprice)
print("----------")
print()
else:
# warning if wrong input
print("Invalid Package!Please try again.")
print()
# Looping for other package selection (adult)
print()

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Run Code

```
                    print()
                    game_package = input("Add More Another Package?(y/n): ")
                    print()

                # Adding data into list
                totalprice_list.add(totalprice)

            # Pass to other user selection
            print()
            other_user = input(" Next Person?(y/n): ")
            print()

        # Printing list for customer's name
        print("-------------------------")
        print("LIST OF CUSTOMER'S NAME")
        print("-------------------------")
        namelist.print()

        print()

        #printing list for total payment
        print("-------------------------")
        print("TOTAL PAYMENT IN LIST")
        print("-------------------------")
        totalprice_list.print()

        print()

        #size of list customer
        print("Total Customer: ", namelist.size())
        print()

        print()
```

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Run Code

```python
            print()

            menu = input("Go Back To Main Menu?(y/n): ")
            print()


        elif answer == '2':

                print("------------------------------------------------------------")
                print(" ·｡ ·｡ ·CUSTOMER'S NAME CHECKING IN TICKET PAYMENT LIST·｡ ·｡ ·")
                print("------------------------------------------------------------")

                respond = input(" Search For Customer Name?(y/n): ")
                while respond !='n':
                    print()
                    name = input("Enter The Search Name: ")
                    found = namelist.search(name)
                    if found:
                        print(name, " Is EXISTED In Ticket Payment List\n")
                    else:
                        print(name, " Is NOT EXISTED in Ticket Payment List\n")
                        print()

                    respond = input("Continue To Search Customer Name?(y/n): ")

                menu = input("Go Back To Main Menu?(y/n): ")
                print()


        #option option 3
        elif answer == '3':
            print("---------------------------")
            print(" ·｡ ·｡ ·DISTANCE TRAVELED SECTION·｡ ·｡ ·")
            print("---------------------------")
```

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View Insert Cell Kernel Widgets Help

Run Code

```
490             print("--------------------------------")
491             print()
492
493             # Location list, graph list and location count
494             location = []
495             graph = []
496             location_count = 0
497
498             # Adding data into location list
499             add_location("A")
500             add_location("B")
501             add_location("C")
502             add_location("D")
503             add_location("E")
504             add_location("F")
505             add_location("G")
506             add_location("H")
507
508             # Weight and Direction for Location A - (iMagination 3D Theatre)
509             add_distance("A","C",500)
510             add_distance("A","H",122)
511             add_distance("A","F",250)
512             #Suggest the shortest way if across the other nodes (location)
513             add_distance("A","B",566)
514             add_distance("A","D",323)
515             add_distance("A","E",712)
516             add_distance("A","G",479)
517
518
519             # Weight and Direction for Location B - (DESA Wave Pool)
520             add_distance("B","C",147)
521             add_distance("B","E",154)
522             add_distance("B","D",243)
523             #Suggest the shortest way if across the other nodes (location)
```

Assignment DSA Finale Project Sesi 3.2022_(AISYAH AINA SUFIA BIN... Last Checkpo

View Insert Cell Kernel Widgets Help

Run Code

```
#Suggest the shortest way if across the other nodes (location)
add_distance("B","A",566)
add_distance("B","F",553)
add_distance("B","G",391)
add_distance("B","H",444)


# Weight and Direction for Location C - (Dragon Coaster Ride)
add_distance("C","B",147)
add_distance("C","D",110)
add_distance("C","H",317)
add_distance("C","A",500)
#Suggest the shortest way if across the other nodes (location)
add_distance("C","E",301)
add_distance("C","F",417)
add_distance("C","G",266)


# Weight and Direction for Location D - Zombie House ESCAPE!
add_distance("D","B",243)
add_distance("D","C",110)
add_distance("D","H",201)
add_distance("D","F",310)
add_distance("D","G",156)
add_distance("D","E",389)
#Suggest the shortest way if across the other nodes (location)
add_distance("D","A",323)


# Weight and Direction for Location E - Splash 'N' Swirl Safari
add_distance("E","B",154)
add_distance("E","D",389)
add_distance("E","G",237)
#Suggest the shortest way if across the other nodes (location)
```

View Insert Cell Kernel Widgets Help

Run Code

```
add_distance("E","G",237)
#Suggest the shortest way if across the other nodes (location)
add_distance("E","A",712)
add_distance("E","C",301)
add_distance("E","F",699)
add_distance("E","H",590)


# Weight and Direction for Location F - VR: Shoot The ENEMY!
add_distance("F","A",250)
add_distance("F","D",310)
add_distance("F","G",496)
add_distance("F","H",100)
#Suggest the shortest way if across the other nodes (location)
add_distance("F","B",553)
add_distance("F","C",417)
add_distance("F","G",496)
add_distance("F","E",690)


# Weight and Direction for Location G - MINI Zoo Tour
add_distance("G","E",237)
add_distance("G","D",156)
add_distance("G","F",310)
#Suggest the shortest way if across the other nodes (location)
add_distance("G","A",479)
add_distance("G","B",391)
add_distance("G","C",310)
add_distance("G","H",357)


# Weight and Direction for Location H - Lost Kingdom Ride
add_distance("H","A",122)
add_distance("H","C",317)
add_distance("H","D",201)
```

Assignment DSA Finale Project Sesi 3.2022_(AISYAH AINA SUFIA BIN... Last Checkpoint: an

View Insert Cell Kernel Widgets Help

Run Code

```
588             add_distance("H","C",317)
589             add_distance("H","D",201)
590             add_distance("H","F",100)
591             #Suggest the shortest way if across the other nodes (location)
592             add_distance("H","B",444)
593             add_distance("H","E",590)
594             add_distance("H","G",357)
595
596
597             # Declare the Variable
598             totaldistance = 0
599             distance_menu = 'y'
600
601             # Distance Menu Looping
602             while distance_menu == 'y':
603                 print()
604
605                 # Display MENU for user reference
606                 print()
607                 print("————————————— DISTANCE TRAVEL ————————————— ")
608                 print()
609                 print("    NAME                          LOCATION         ")
610                 print()
611                 print("iMagination 3D Theatre              A              ")
612                 print("DESA Wave Pool                      B              ")
613                 print("Dragon Coaster Ride                 C              ")
614                 print("Zombie House ESCAPE!                D              ")
615                 print("Splash 'N' Swirl Safari             E              ")
616                 print("VR: Shoot That ENEMY!               F              ")
617                 print("MINI Zoo Tour                       G              ")
618                 print("Lost Kingdom Ride                   H              ")
619                 print()
620
621                 # User key in their input
```

Assignment DSA Finale Project Sesi 3.2022_(AISYAH AINA SUFIA BIN… Last Checkpoint: an hour ago (autosaved)

View Insert Cell Kernel Widgets Help Trusted

Run Code

```
                # User key in their input
                L1 = input("Enter location: ")
                L1 = L1.capitalize()
                print()
                L2 = input("Enter Next Location: ")
                L2 = L2.capitalize()
                print()

                # Creating Graph
                index1 = find_distance(L1)
                index2 = find_distance(L2)

                distance = find_total_distance(index1,index2)
                totaldistance = totaldistance + distance

                print("Total Distance travelled:",totaldistance,"M")
                print()
                distance_menu = input("Do you wish to continue?(y/n): ")
                print()
            menu = input("Go Back To Main Menu?(y/n): ")
            print()

        # user Choose option 3
        elif answer == '4':
            print()
            print("™[redacted]™")
            print("             THANK YOU!","\u2764\uFE0F","ENJOY EVERY MOMENTS IN DESA THEME PARK""\U0001f600""")
            break

        else:
            # warning for Invalid Input
            print("Invalid Input!!! Try again. ")
            print()
```


Assignment DSA Finale Project Sesi 3.2022_(AISYAH AINA SUFIA BIN...
Last Checkpoint: an hour ago (autosaved)
View Insert Cell Kernel Widgets Help
Trusted
Run
Code
menu = input("Go Back To Main Menu?(y/n): ")
print()
# user Choose option 3
elif answer == '4':
print()
print("™ ™")
print(" THANK YOU!","\u2764\uFE0F","ENJOY EVERY MOMENTS IN DESA THEME PARK""\U0001f600""")
break
else:
# warning for Invalid Input
print("Invalid Input!!! Try again. ")
print()
else:
print()
print("™ ™")
print(" THANK YOU!","\u2764\uFE0F","ENJOY EVERY MOMENTS IN DESA THEME PARK""\U0001f600""")
# Appropriate farewell (exit program)
else:
print()
print("™ ™")
print(" THANK YOU!","\u2764\uFE0F","ENJOY EVERY MOMENTS IN DESA THEME PARK""\U0001f600""")
Type 'start' to begin
:start
****
°☆.。.:*・°・°☆.。. WELOCOME TO DESA THEME PARK・°☆.。.:*・°・°☆.。.:*
****

6.2) Coding of An Application (page 27)

```
#### Linked List Process

class Vertex:
    def __init__(self,initdata):
        self.data = initdata
        self.next = None

    def getData(self):
        return self.data

    def getNext(self):
        return self.next

    def setData(self,newdata):
        self.data = newdata

    def setNext(self,newnext):
        self.next = newnext

class List:

    def __init__(self):
        self.head = None

    def empty(self):
        return self.head == None

    def add(self,item):
        temp = Vertex(item)
        temp.setNext(self.head)
        self.head = temp

    def size(self):
        current = self.head
        count = 0

        while current != None:
            count = count + 1
            current = current.getNext()

        return count
```

```
    def search(self,item):
        current = self.head
        found = False

        while current != None and not found:
            if current.getData() == item:
                found = True
            else:
                current = current.getNext()

        return found

    def remove(self,item):
        current = self.head
        previous = None
        found = False

        while not found:
            if current.getData() == item:
                found = True
            else:
                previous = current
                current = current.getNext()

        if previous == None:
            self.head = current.getNext()
        else:
            previous.setNext(current.getNext())

    def print(self):
        current = self.head

        while current != None:
            print(current.getData())
            current = current.getNext()

#### Graph Process Code

def add_location(L):
    global location_count
    location_count = location_count + 1
    location.append(L)
    for x in graph:
        x.append(0)

    temp = []
```

```
    for y in range (location_count):
        temp.append(0)
    graph.append(temp)

def add_distance(L1,L2,distance):
        index1 = location.index(L1)
        index2 = location.index(L2)
        graph[index1][index2] = distance
        graph[index2][index1] = distance

def print_graph():
    for i in range (location_count):
        for j in range(location_count):
            print(format(graph[i][j],"<3"),end = " ")
        print()

def find_total_distance(L1,L2):
    return int(graph[L1][L2])

def find_distance(D):
    pos = 0

    while pos < len(location):
        if location[pos] == D:
            index = pos
        pos = pos + 1

    return index

# declare to start the program
print("Type 'start' to begin")
answer = input(":")
print()

#looping for menu
menu = 'y'

# Declare Linked List
namelist = List()
totalprice_list = List()


# Main Program (looping)
if answer == 'start':
    while menu == 'y':
```

```
        # appropriate greetings
        # Main Menu

print("**********************************************************************
***********")
        print("°☆.。.:*・°・°☆.。.\033[1m WELOCOME TO DESA THEME PARK
・°☆.。.:*・°・°☆.。.:* ")

print("**********************************************************************
***********")
        print()
        print("HELLO WHAT CAN WE HELP YOU TODAY?")
        print()
        print("\u2764\uFE0F","MENU","\u2764\uFE0F")
        print ("\n1.) PURCHASE TICKETS  \n2.) CHECK CUSTOMER'S NAME
\n3.) DISTANCE TRAVEL   \n4.) EXIT ")
        print()
        print
("**********************************************************************
*******")

        print()

        # From User Input
        answer = input("Your Options From Menu?(number): ")
        print()

        # User Choose option 1
        if answer == '1':
            print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━")
            print("・。・。・。TICKETS PURCHASE SECTION・。・。・。")
            print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━")
            print()

            # Collection of Variable
            other_user = 'y'
            while other_user == 'y':
                game_package = 'y'
                totalprice = 0

                print()

                # User Input Name
                name = input("Please Enter Your Name: ")
```

```
                # User input name added into the list
                namelist.add(name)

                print()

                # User Input Age
                age = int(input("Please Enter Your Age: "))

                print()

                #Kids Price Menu
                if age <= 12:
                    # Looping for kids game options
                    while game_package == 'y':
                        print("Hello",name,"!","Please Choose Your
Game Tickets ")
                        print("━━━━━━━━━━━━━━━━━━━━━━━━ KIDS PACKAGE
━━━━━━━━━━━━━━━━━━━━━━━━ ")
                        print()
                        print("    NAME                          PACKAGE
PRICE")
                        print()
                        print("iMagination 3D Theatre             A
RM3.00/each")
                        print("DESA Wave Pool                     B
RM2.00/each")
                        print("Dragon Coaster Ride                C
RM5.10/each")
                        print("Zombie House ESCAPE!               D
RM4.00/each")
                        print("Splash 'N' Swirl Safari            E
RM2.50/each")
                        print("VR: Shoot That ENEMY!              F
RM5.30/each")
                        print("MINI Zoo Tour                      G
RM1.60/each")
                        print("Lost Kingdom Ride                  H
RM3.50/each")
                        print()

                        # user Input : Package Selection
                        package = input("Choose Your Package: ")
                        package = package.capitalize()
                        print()

                        # Price & total Calculation for each package
```

```
                        if package == 'A':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 3 * qty
                            totalprice = totalprice + price
                            print("'iMagination 3D Theatre' Has Added
To Cart")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Price Package A: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'B':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 2 * qty
                            totalprice = totalprice + price
                            print("'DESA Wave Pool' Has Added To
Cart!")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Price Package B: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'C':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 5.10 * qty
                            totalprice = totalprice + price
                            print("'Dragon Coaster Ride'Has Added To
Cart!")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Price Package C: RM",price)
                            print("Total Current Price:
RM",totalprice)
```

```
print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'D':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 4 * qty
                            totalprice = totalprice + price
                            print("'Zombie House ESCAPE!'Has Added To
Cart!")

print("────────────────────────────────────────────────────────────"
)
                            print("Price of Package D: RM",price)
                            print("Total Current price:
RM",totalprice)

print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'E':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 2.50 * qty
                            totalprice = totalprice + price
                            print("'Splash 'N' Swirl Safari' Has Added
To Cart!")

print("────────────────────────────────────────────────────────────"
)
                            print("Price of Package E: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'F':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 5.30 * qty
                            totalprice = totalprice + price
                            print("'VR:Shoot That ENEMY!'Has Added To
Cart!")
```

```
print("────────────────────────────────────────────────────────────────"
)
                            print("Price of Package F: RM",price)
                            print("Total Current Payment:
RM",totalprice)

print("────────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'G':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 1.60 * qty
                            totalprice = totalprice + 1.60
                            print("'MINI Zoo Tour' Has Added To
Cart!")

print("────────────────────────────────────────────────────────────────"
)
                            print("Price: RM",price)
                            print("Total payment: RM",totalprice)

print("────────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'H':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 3.50 * qty
                            totalprice = totalprice + price
                            print("'Lost Kingdom Ride' Has Added To
Cart!")

print("────────────────────────────────────────────────────────────────"
)
                            print("Price of package H: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("────────────────────────────────────────────────────────────────"
)
                            print()

                        else:
                            print("Invalid Package! Try again. ")
```

```
                            print()

                        # Looping For Other Package Selection For Kids
                            print()
                            game_package = input("Add More Another
Package?(y/n): ")
                            print()

                        # Add Data TotalPrice Into list
                        totalprice_list.add(totalprice)

                else:
                    # Looping for Adult Package
                    while game_package == 'y':
                        print("Hello",name,"!","Please Choose Your
Game Tickets ")
                        print("━━━━━━━━━━━━━━━━━━━━━━ ADULT PACKAGE
━━━━━━━━━━━━━━━━━━━━━━━━ ")
                        print()
                        print("    NAME                          PACKAGE
PRICE")
                        print()
                        print("iMagination 3D Theatre             A
RM5.00/each")
                        print("DESA Wave Pool                     B
RM4.75/each")
                        print("Dragon Coaster Ride                C
RM8.10/each")
                        print("Zombie House ESCAPE!               D
RM5.30/each")
                        print("Splash 'N' Swirl Safari            E
RM7.45/each")
                        print("VR: Shoot That ENEMY!              F
RM10.31/each")
                        print("MINI Zoo Tour                      G
RM3.65/each")
                        print("Lost Kingdom Ride                  H
RM6.50/each")
                        print()

                        #user input for adult package
                        package = input("Choose Your Package: ")
                        package = package.capitalize()
                        print()

                        # Activity calculation
```

```
                        if package == 'A':
                            qty = int(input("How Many Tickets?: "))
                            price = 5 * qty
                            totalprice = totalprice + price
                            print("'iMagination 3D Theatre' Has Added
To Cart!")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Price of Package A: RM", price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'B':
                            qty = int(input("How Many Tickets?: "))
                            price = 4.75 * qty
                            totalprice = totalprice + price
                            print("'DESA Wave Pool' Has Added To
Cart!")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Price of Package B: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'C':
                            qty = int(input("Quantity of Tickets?: "))
                            price = 8.10 * qty
                            totalprice = totalprice + price
                            print("'Dragon Coaster Ride' Has Added To
Cart!")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Total Price Package C: RM",price)
                            print("Total Current Price:
RM",totalprice)
```

```
print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'D':
                            qty = int(input("How Many Tickets?: "))
                            price = 5.30 * qty
                            totalprice = totalprice + price
                            print("'Zombie House ESCAPE!'Has Added To
Cart! ")

print("────────────────────────────────────────────────────────────"
)
                            print("Total Price Package D: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'E':
                            qty = int(input("How Many Tickets?: "))
                            price = 7.45 * qty
                            totalprice = totalprice + price
                            print("'Splash 'N' Swirl' Has Added To
Cart! ")

print("────────────────────────────────────────────────────────────"
)
                            print("Total Price Package E: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("────────────────────────────────────────────────────────────"
)
                            print()

                        elif package == 'F':
                            qty = int(input("How Many Tickets?: "))
                            price = 10.31 * qty
                            totalprice = totalprice + price
                            print("'VR:Shoot That ENEMY!' Has Added To
Cart! ")
```

```
print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Total Price Package F: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'G':
                            qty = int(input("How Many Tickets?: "))
                            price = 3.65 * qty
                            totalprice = totalprice + price
                            print("'MINI Zoo Tour' Has Added To Cart!
")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Total Price Package G: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        elif package == 'H':
                            qty = int(input("How Many Tickets?: "))
                            price = 6.50 * qty
                            totalprice = totalprice + price
                            print("'Lost Kingdom Ride' Has Added To
Cart! ")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print("Total Price Package H: RM",price)
                            print("Total Current Price:
RM",totalprice)

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━"
)
                            print()

                        else:
```

```
                            # warning if wrong input
                            print("Invalid Package!Please try again.")
                            print()

                        # Looping for other package selection (adult)
                        print()
                        game_package = input("Add More Another
Package?(y/n): ")
                        print()

                    # Adding data into list
                    totalprice_list.add(totalprice)

                # Pass to other user selection
                print()
                other_user = input(" Next Person?(y/n): ")
                print()

            # Printing list for customer's name
            print("━━━━━━━━━━━━━━━━━━━━━━")
            print("LIST OF CUSTOMER'S NAME")
            print("━━━━━━━━━━━━━━━━━━━━━━")
            namelist.print()

            print()

            #printing list for total payment
            print("━━━━━━━━━━━━━━━━━━━━━━")
            print("TOTAL PAYMENT IN LIST")
            print("━━━━━━━━━━━━━━━━━━━━━━")
            totalprice_list.print()

            print()

            #size of list customer
            print("Total Customer: ", namelist.size())
            print()

            print()

            menu = input("Go Back To Main Menu?(y/n): ")
            print()


        elif answer == '2':
```

```
print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━")
                print("･｡･｡･CUSTOMER'S NAME CHECKING IN TICKET 
PAYMENT LIST･｡･｡･")

print("━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━━")

                respond = input(" Search For Customer Name?(y/n): ")
                while respond !='n':
                    print()
                    name = input("Enter The Search Name: ")
                    found = namelist.search(name)
                    if found:
                        print(name, " Is Existed In Ticket Payment 
List\n")
                    else:
                        print(name, " Is NOT Existed in Ticket Payment 
List\n")
                        print()

                    respond = input("Continue To Search Customer 
Name?(y/n): ")

                menu = input("Go Back To Main Menu?(y/n): ")
                print()


        #option option 3
        elif answer == '3':
            print("━━━━━━━━━━━━━━━━━━━━━━━━━━━")
            print("･｡･｡･DISTANCE TRAVELED SECTION･｡･｡･")
            print("━━━━━━━━━━━━━━━━━━━━━━━━━━━")
            print()

            # Location list, graph list and location count
            location = []
            graph = []
            location_count = 0

            # Adding data into location list
            add_location("A")
            add_location("B")
            add_location("C")
            add_location("D")
            add_location("E")
```

```
            add_location("F")
            add_location("G")
            add_location("H")

            # Weight and Direction for Location A - (iMagination 3D
Theatre)
            add_distance("A","C",500)
            add_distance("A","H",122)
            add_distance("A","F",250)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("A","B",566)
            add_distance("A","D",323)
            add_distance("A","E",712)
            add_distance("A","G",479)


            # Weight and Direction for Location B - (DESA Wave Pool)
            add_distance("B","C",147)
            add_distance("B","E",154)
            add_distance("B","D",243)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("B","A",566)
            add_distance("B","F",553)
            add_distance("B","G",391)
            add_distance("B","H",444)


            # Weight and Direction for Location C - (Dragon Coaster
Ride)
            add_distance("C","B",147)
            add_distance("C","D",110)
            add_distance("C","H",317)
            add_distance("C","A",500)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("C","E",301)
            add_distance("C","F",417)
            add_distance("C","G",266)


            # Weight and Direction for Location D - Zombie House
ESCAPE!
            add_distance("D","B",243)
            add_distance("D","C",110)
```

```
            add_distance("D","H",201)
            add_distance("D","F",310)
            add_distance("D","G",156)
            add_distance("D","E",389)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("D","A",323)


            # Weight and Direction for Location E - Splash 'N' Swirl
Safari
            add_distance("E","B",154)
            add_distance("E","D",389)
            add_distance("E","G",237)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("E","A",712)
            add_distance("E","C",301)
            add_distance("E","F",699)
            add_distance("E","H",590)


            # Weight and Direction for Location F - VR: Shoot The
ENEMY!
            add_distance("F","A",250)
            add_distance("F","D",310)
            add_distance("F","G",496)
            add_distance("F","H",100)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("F","B",553)
            add_distance("F","C",417)
            add_distance("F","G",496)
            add_distance("F","E",690)


            # Weight and Direction for Location G - MINI Zoo Tour
            add_distance("G","E",237)
            add_distance("G","D",156)
            add_distance("G","F",310)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("G","A",479)
            add_distance("G","B",391)
            add_distance("G","C",310)
            add_distance("G","H",357)
```

```
            # Weight and Direction for Location H - Lost Kingdom Ride
            add_distance("H","A",122)
            add_distance("H","C",317)
            add_distance("H","D",201)
            add_distance("H","F",100)
            #Suggest the shortest way if across the other nodes
(location)
            add_distance("H","B",444)
            add_distance("H","E",590)
            add_distance("H","G",357)


            # Declare the Variable
            totaldistance = 0
            distance_menu = 'y'

            # Distance Menu Looping
            while distance_menu == 'y':
                print()

                # Display MENU for user reference
                print("Hello",name,"!","Please select from where and
where you want to go ")
                print()
                print("━━━━━━━━━━━━━━━ DISTANCE TRAVEL
━━━━━━━━━━━━━━━━ ")
                print()
                print("    NAME                          LOCATION
")
                print()
                print("iMagination 3D Theatre             A
")
                print("DESA Wave Pool                     B
")
                print("Dragon Coaster Ride                C
")
                print("Zombie House ESCAPE!               D
")
                print("Splash 'N' Swirl Safari            E
")
                print("VR: Shoot That ENEMY!              F
")
                print("MINI Zoo Tour                      G
")
```

```
                print("Lost Kingdom Ride                  H
")
                print()

                # User key in their input
                L1 = input("Enter location: ")
                L1 = L1.capitalize()
                print()
                L2 = input("Enter Next Location: ")
                L2 = L2.capitalize()
                print()

                # Creating Graph
                index1 = find_distance(L1)
                index2 = find_distance(L2)

                distance = find_total_distance(index1,index2)
                totaldistance = totaldistance + distance

                print("Total Distance travelled:",totaldistance,"M")
                print()
                distance_menu = input("Do you wish to continue?(y/n):
")
                print()
            menu = input("Go Back To Main Menu?(y/n): ")
            print()

        # user Choose option 3
        elif answer == '4':
            print()

print("™[illegible]
[illegible]™")
            print("             THANK YOU!","\u2764\uFE0F","ENJOY
EVERY MOMENTS IN DESA THEME PARK""\U0001f600""")
            break

        else:
            # warning for Invalid Input
            print("Invalid Input!!! Try again. ")
            print()

    else:
        print()
```

```
print("™║█║▌║█║▌│║▌║▌█║║█║▌║█║▌│║▌║▌█║║█║▌║█║▌│║▌║▌█║║█
║▌║█║▌│║▌║▌█║║█║▌║™")
        print("             THANK YOU!","\u2764\uFE0F","ENJOY EVERY
MOMENTS IN DESA THEME PARK""\U0001f600""")

# Appropriate farewell (exit program)
else:
    print()

print("™║█║▌║█║▌│║▌║▌█║║█║▌║█║▌│║▌║▌█║║█║▌║█║▌│║▌║▌█║║█
║▌║█║▌│║▌║▌█║║█║▌║™")
    print("         THANK YOU!","\u2764\uFE0F","ENJOY EVERY MOMENTS IN
DESA THEME PARK""\U0001f600""")
```

6.4) Print Screen Of Output

```
Type 'start' to begin
:start

********************************************************************************
°☆.。 .:* ・ ° ・ °☆.。 . WELOCOME TO DESA THEME PARK ・ °☆.。 .:* ・ ° ・ °☆.。 .:*
********************************************************************************

HELLO WHAT CAN WE HELP YOU TODAY?

❤️ MENU ❤️

1.) PURCHASE TICKETS
2.) CHECK CUSTOMER'S NAME
3.) DISTANCE TRAVEL
4.) EXIT

********************************************************************************

Your Options From Menu?(number): 1

_____________________________________________________
・。 ・。 ・。 TICKETS PURCHASE SECTION ・。 ・。 ・。
_____________________________________________________


Please Enter Your Name: Aisyah

Please Enter Your Age: 23
Date of Booking Your Tickets: 29/02/2022

Hello Aisyah ! Please Choose Your Game Tickets
_____________________________________ ADULT PACKAGE _____________________________________
```

```
Please Enter Your Name: Aisyah

Please Enter Your Age: 23
Date of Booking Your Tickets: 29/02/2022

Hello Aisyah ! Please Choose Your Game Tickets
──────────────────────────────────────── ADULT PACKAGE ────────────────────────────────────────

    NAME                        PACKAGE              PRICE

iMagination 3D Theatre            A                RM5.00/each
DESA Wave Pool                    B                RM4.75/each
Dragon Coaster Ride               C                RM8.10/each
Zombie House ESCAPE!              D                RM5.30/each
Splash 'N' Swirl Safari           E                RM7.45/each
VR: Shoot That ENEMY!             F                RM10.31/each
MINI Zoo Tour                     G                RM3.65/each
Lost Kingdom Ride                 H                RM6.50/each

Choose Your Package: A

How Many Tickets?: 2
'iMagination 3D Theatre' Has Added To Cart!
──────────────────────────────────────────────────────────────────────────────────────────────

Price of Package A: RM 10
Total Current Price: RM 10
──────────────────────────────────────────────────────────────────────────────────────────────


Add More Another Package?(y/n): y

Hello Aisyah ! Please Choose Your Game Tickets
──────────────────────────────────────── ADULT PACKAGE ────────────────────────────────────────
```

```
Add More Another Package?(y/n): y

Hello Aisyah ! Please Choose Your Game Tickets
──────────────────────────────────────── ADULT PACKAGE ────────────────────────────────────────

    NAME                        PACKAGE             PRICE

iMagination 3D Theatre            A               RM5.00/each
DESA Wave Pool                    B               RM4.75/each
Dragon Coaster Ride               C               RM8.10/each
Zombie House ESCAPE!              D               RM5.30/each
Splash 'N' Swirl Safari           E               RM7.45/each
VR: Shoot That ENEMY!             F               RM10.31/each
MINI Zoo Tour                     G               RM3.65/each
Lost Kingdom Ride                 H               RM6.50/each

Choose Your Package: B

How Many Tickets?: 2
'DESA Wave Pool' Has Added To Cart!
──────────────────────────────────────────────────────────────────────────────────────────────

Price of Package B: RM 9.5
Total Current Price: RM 19.5
──────────────────────────────────────────────────────────────────────────────────────────────


Add More Another Package?(y/n): n


 Next Person?(y/n): y


Please Enter Your Name: Amirah
```

```
Please Enter Your Name: Amirah

Please Enter Your Age: 11
Date of Booking Your Tickets: 16/02/2022

Hello Amirah !  Now Please Choose Your Game Tickets
──────────────────────────────────────── KIDS PACKAGE ────────────────────────────────────────

    NAME                        PACKAGE             PRICE

iMagination 3D Theatre            A               RM3.00/each
DESA Wave Pool                    B               RM2.00/each
Dragon Coaster Ride               C               RM5.10/each
Zombie House ESCAPE!              D               RM4.00/each
Splash 'N' Swirl Safari           E               RM2.50/each
VR: Shoot That ENEMY!             F               RM5.30/each
MINI Zoo Tour                     G               RM1.60/each
Lost Kingdom Ride                 H               RM3.50/each

Choose Your Package: C

Quantity of Tickets?: 2
'Dragon Coaster Ride'Has Added To Cart!
──────────────────────────────────────────────────────────────────────────────────────────────
Price Package C: RM 10.2
Total Current Price: RM 10.2
──────────────────────────────────────────────────────────────────────────────────────────────


Add More Another Package?(y/n): y

Hello Amirah !  Now Please Choose Your Game Tickets
──────────────────────────────────────── KIDS PACKAGE ────────────────────────────────────────
```

```
Hello Amirah !  Now Please Choose Your Game Tickets
──────────────────────────────────────── KIDS PACKAGE ────────────────────────────────────────

    NAME                          PACKAGE              PRICE

iMagination 3D Theatre              A                RM3.00/each
DESA Wave Pool                      B                RM2.00/each
Dragon Coaster Ride                 C                RM5.10/each
Zombie House ESCAPE!                D                RM4.00/each
Splash 'N' Swirl Safari             E                RM2.50/each
VR: Shoot That ENEMY!               F                RM5.30/each
MINI Zoo Tour                       G                RM1.60/each
Lost Kingdom Ride                   H                RM3.50/each

Choose Your Package: D

Quantity of Tickets?: 2
'Zombie House ESCAPE!'Has Added To Cart!
──────────────────────────────────────────────────────────────────────────────────────────────

Price of Package D: RM 8
Total Current price: RM 18.2
──────────────────────────────────────────────────────────────────────────────────────────────


Add More Another Package?(y/n): n


 Next Person?(y/n): y


Please Enter Your Name: Amin

Please Enter Your Age: 45
Date of Booking Your Tickets: 30/03/2022
```

```
Please Enter Your Age: 45
Date of Booking Your Tickets: 30/03/2022

Hello Amin ! Please Choose Your Game Tickets
_____________________________________ ADULT PACKAGE _____________________________________

    NAME                        PACKAGE             PRICE

iMagination 3D Theatre            A               RM5.00/each
DESA Wave Pool                    B               RM4.75/each
Dragon Coaster Ride               C               RM8.10/each
Zombie House ESCAPE!              D               RM5.30/each
Splash 'N' Swirl Safari           E               RM7.45/each
VR: Shoot That ENEMY!             F               RM10.31/each
MINI Zoo Tour                     G               RM3.65/each
Lost Kingdom Ride                 H               RM6.50/each

Choose Your Package: E

How Many Tickets?: 2
'Splash 'N' Swirl' Has Added To Cart!
_____________________________________________________________________________________________
Total Price Package E: RM 14.9
Total Current Price: RM 14.9
_____________________________________________________________________________________________


Add More Another Package?(y/n): n


 Next Person?(y/n): n

_____________________________________
LIST OF CUSTOMER'S NAME
```

```
LIST OF CUSTOMER'S NAME
_____________________________________________

Amin
Amirah
Aisyah

_____________________________________________
TOTAL PAYMENT IN LIST
_____________________________________________
14.9
18.2
19.5

Total Customer:  3


Go Back To Main Menu?(y/n): y

*********************************************************************************
°☆.。 .:* · ° · °☆.。 . WELOCOME TO DESA THEME PARK · °☆.。 .:* · ° · °☆.。 .:*
*********************************************************************************

HELLO WHAT CAN WE HELP YOU TODAY?

❤️ MENU ❤️

1.) PURCHASE TICKETS
2.) CHECK CUSTOMER'S NAME
3.) DISTANCE TRAVEL
4.) EXIT

*********************************************************************************

Your Options From Menu?(number): 2
```

```
Your Options From Menu?(number): 2

--------------------------------------------------------------------------------
·。 ·。 ·CUSTOMER'S NAME CHECKING IN TICKET PAYMENT LIST·。 ·。 ·
--------------------------------------------------------------------------------
 Search For Customer Name?(y/n): y

Enter The Search Name: Amin
Amin  Is EXISTED In Ticket Payment List

Continue To Search Customer Name?(y/n): y

Enter The Search Name: Amirah
Amirah  Is EXISTED In Ticket Payment List

Continue To Search Customer Name?(y/n): y

Enter The Search Name: Aisyah
Aisyah  Is EXISTED In Ticket Payment List

Continue To Search Customer Name?(y/n): y

Enter The Search Name: Ali
Ali  Is NOT EXISTED in Ticket Payment List


Continue To Search Customer Name?(y/n): y

Enter The Search Name: Ahmad
Ahmad  Is NOT EXISTED in Ticket Payment List


Continue To Search Customer Name?(y/n): n
Go Back To Main Menu?(y/n): y
```

```
Continue To Search Customer Name?(y/n): n
Go Back To Main Menu?(y/n): y

********************************************************************************
°☆.。 .:* · ° · °☆.。 . WELOCOME TO DESA THEME PARK · °☆.。 .:* · ° · °☆.。 .:*
********************************************************************************

HELLO WHAT CAN WE HELP YOU TODAY?

❤️ MENU ❤️

1.) PURCHASE TICKETS
2.) CHECK CUSTOMER'S NAME
3.) DISTANCE TRAVEL
4.) EXIT

********************************************************************************

Your Options From Menu?(number): 3

_____________________________________________
·。 ·。 ·DISTANCE TRAVELED SECTION·。 ·。 ·
_____________________________________________


Hello Ahmad ! Please select from where and where you want to go

_____________________________ DISTANCE TRAVEL ______________________________

    NAME                          LOCATION

iMagination 3D Theatre              A
DESA Wave Pool                      B
Dragon Coaster Ride                 C
```

```
Dragon Coaster Ride                C
Zombie House ESCAPE!               D
Splash 'N' Swirl Safari            E
VR: Shoot That ENEMY!              F
MINI Zoo Tour                      G
Lost Kingdom Ride                  H


Enter location: A

Enter Next Location: H

Total Distance travelled: 122 M

Do you wish to continue?(y/n): y


Hello Ahmad ! Please select from where and where you want to go

──────────── DISTANCE TRAVEL ────────────

    NAME                          LOCATION

iMagination 3D Theatre             A
DESA Wave Pool                     B
Dragon Coaster Ride                C
Zombie House ESCAPE!               D
Splash 'N' Swirl Safari            E
VR: Shoot That ENEMY!              F
MINI Zoo Tour                      G
Lost Kingdom Ride                  H

Enter location: G
```

```
Enter Next Location: B

Total Distance travelled: 513 M

Do you wish to continue?(y/n): y


Hello Ahmad ! Please select from where and where you want to go

──────────── DISTANCE TRAVEL ────────────

    NAME                          LOCATION

iMagination 3D Theatre              A
DESA Wave Pool                      B
Dragon Coaster Ride                 C
Zombie House ESCAPE!                D
Splash 'N' Swirl Safari             E
VR: Shoot That ENEMY!               F
MINI Zoo Tour                       G
Lost Kingdom Ride                   H

Enter location: H

Enter Next Location: C

Total Distance travelled: 830 M

Do you wish to continue?(y/n): n

Go Back To Main Menu?(y/n): y

********************************************************************************
```

```
Total Distance travelled: 830 M

Do you wish to continue?(y/n): n

Go Back To Main Menu?(y/n): y

********************************************************************************
°☆.。 .:* · ° · °☆.。 . WELOCOME TO DESA THEME PARK · °☆.。 .:* · ° · °☆.。 .:*
********************************************************************************

HELLO WHAT CAN WE HELP YOU TODAY?

❤ MENU ❤

1.) PURCHASE TICKETS
2.) CHECK CUSTOMER'S NAME
3.) DISTANCE TRAVEL
4.) EXIT

********************************************************************************

Your Options From Menu?(number): 4

™                                                                          ™
              THANK YOU! ❤ ENJOY EVERY MOMENTS IN DESA THEME PARK😀
```