A REPORT OF FOUR WEEK TRAINING

At

Allsoft Solutions and Services Pvt. Ltd.

(A Pioneer organization & IBM Business Partner)

SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD

OF THE DEGREE OF

BACHELOR OF TECHNOLOGY

(Computer Science and Engineering)

JULY-AUGUST, 2022

SUBMITTED BY:

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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

GURU NANAK DEV ENGINEERING COLLEGE LUDHIANA

CERTIFICATE BY COMPANY

Allsoft Solutions

2022

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Date: JULY, 2022

TO WHOM IT MAY CONCERN

This is to certify, Manjot Singh Bhatia student of Guru Nanak Dev Engineering College, Ludhiana and Bearing Roll No. 2004622 has undergone 4 Weeks Summer Training on IBM project and technologies with us. The details are as follows:-

PROJECT NAME	Train Ticketing System
TRAINING PERIOD	July, 2022 – August, 2022
TECHNOLOGY	Python Programming – GUI
DURATION OF TRAINING	4 Weeks
REFERENCE NUMBER	AIP/CEP2022/IN/41856
SUBJECT MATTER EXPERT	Ms. Diksha Goutam
ACHIEVEMENTS	Project Completion Certificate and Declaration Letter

During the training, assessment and project period we find the students sincere, hardworking and having good behavior and moral character.

We wish intern all success in future endeavors.

Mr. S. K Garg
In charge | Delivery
Allsoft Solutions and Services

Business Partner IBM

For Allsoft Solutions & Services

Authorised Signatory

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GURU NANAK DEV ENGINEERING COLLEGE LUDHIANA

CANDIDATE'S DECLARATION

I "MANJOT SINGH BHATIA" hereby declare that I have undertaken four week training "Allsoft Solutions and Services Pvt. Ltd. (A Pioneer organization & IBM Business Partner)" during a period from July, 2022 to August, 2022 in partial fulfillment of requirements for the award of degree of B.Tech. (Computer Science and Engineering) at Guru Nanak Dev Engineering College, Ludhiana. The work which is being presented in the training report submitted to Department of Computer Science and Engineering at Guru Nanak Dev Engineering College, Ludhiana is an authentic record of training work.

Name Of Student Signature of Student

1. Manjot Singh Bhatia

The four week industrial training Viva–Voce Examination of_____ has been held on _____ and accepted.

Signature of Internal Examiner Signature of External Examiner

Abstract

Python is a modern, easy-to-learn, object-oriented programming language. Python is a powerful high level, object-oriented programming language created by Guido van Rossum. It has a powerful set of built-in data types and easy-to-use control constructs. Since Python is an interpreted language, it is most easily reviewed by simply looking at and describing interactive sessions. It is used in vast number of applications due to the various standard libraries that come along with it and its capacity to integrate with other languages and use their features. Python can be used for scripting, web scraping, and creating data sets. It's popular in the scientific community for scientific computing; there are libraries that make it easy to share academic code projects in Python. Python is a web programming language, so it interfaces with the internet. It knows how to receive and send web requests and talk to databases. This paper describes the main features of Python programming, loops and control statements in python then discusses applications of Python programming.

Python is a suitable language for both learning and real world programming. In this we first introduce you to the python programming characteristics and features. This also discusses about the reasons behind python being credited as the fastest growing programming language in the recent times supported by research done over the articles procured from various magazines and popular websites. Python automates tasks that would otherwise need to be performed manually. Python programs also tend to be shorter than equivalent programs written in Java because of its built-in high-level data types and its dynamic typing. This features about the characteristics and most important features of python language, the types of programming supported by python and its users and its applications.

Acknowledgment

I am highly grateful to the Dr. Sehijpal Singh, Principal, Guru Nanak Dev Engineering College (GNDEC), Gill Road, Gill Park, Ludhiana, for providing this opportunity to carry out the four-weeks practical training.

The constant guidance and encouragement received from Dr. Parminder Singh, H.O.D.(CSE Department), GNDEC Ludhiana has been of great help in carrying out the project work and is acknowledged with reverential thanks.

I would also like to express my special thanks of gratitude to my teacher Ms. Diksha Goutam, without her wise counsel and able guidance, it would have been impossible to complete the project in this manner.

I express gratitude to other faculty members of Computer Science and Engineering Department of GNDEC for their intellectual support throughout the course of this work. Finally, I am indebted to all whosoever have contributed in this report work.

Manjot Singh Bhatia

About the company

Allsoft Solutions and Services Pvt. Ltd, IBM Business Partner was started in 2000 having headquarters in the USA, with the establishment of three branches in India. Allsoft has been committed to providing the highest quality and needs-based services to its clients, both locally and internationally. We offer IT consulting, Industrial Training Program in various technologies, Web Development and Cloud services as well. We believe in “Making of the era with professionals” in this highly competitive workplace. Our policy towards introducing new, on demand and emerging technology makes us competitive in the market as our goals are to provide the best possible value and to lead in our markets through service and innovation. Being one of the IBM trusted and certified business partner, we offer training in IBM technologies to provide students an exposure to the IBM tools also.

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CHAPTER 1

INTRODUCTION

Installation of Python

Step 1: Go to the URL https://www.python.org/downloads/ and click on the highlighted area.

Figure1.1 - Step 1 Python Installation

Steps 2: After clicking on it wizard to save the file will open. Click it on Save

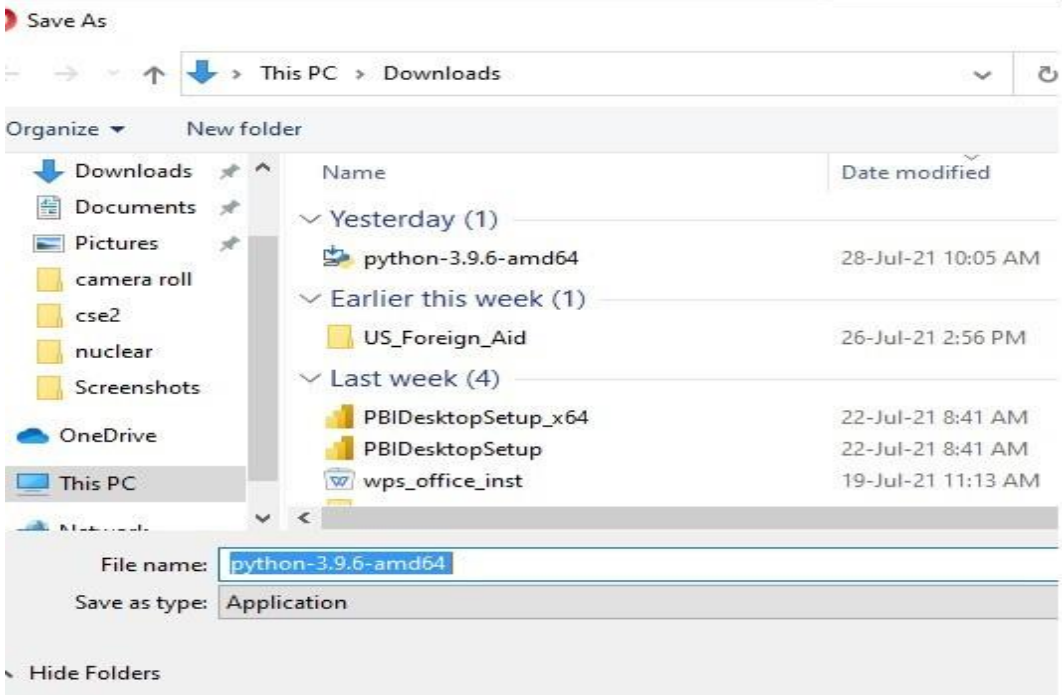

Figure1.2 – Step 2 Python Installation

Step 3: The file with extension .exe will start downloading.

Step 4: Double click on the .exe file.

Step 5: The wizard to install Python will come on screen. Select install now and add Python 3.9 to PATH.

Figure 1.3 – Step 5 Python Installation

Step 6: After clicking on the Install Now Option, the screen showing the progress of Python 3.9.6 will come up. This step will take a few minutes to complete.

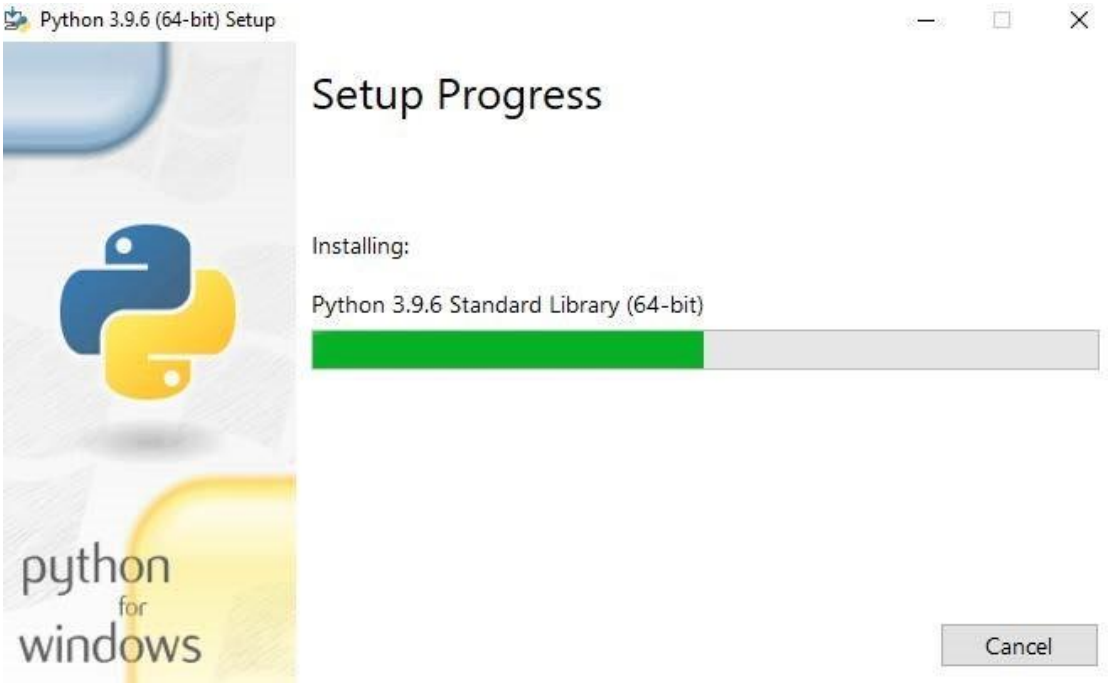

Figure 1.4 – Step 6 Python Installation

Step 7: When the process of installation completed, the wizard showing the message Setup was successful will appear. Click on close button.

Figure 1.5 – Step 7 Python Installation

Step 8: You are ready to use the Python 3.9.6

Python

Python is a very popular general-purpose interpreted, interactive, object-oriented, and highlevel programming language. Python is dynamically-typed and garbage-collected programming language. It was created by Guido van Rossum during 1985- 1990. Like Perl, Python source code is also available under the GNU General Public License (GPL).

Python supports multiple programming paradigms, including Procedural, Object Oriented and Functional programming language. Python design philosophy emphasizes code readability with the use of significant indentation.

Beginning with Python programming:

Finding an Interpreter: Before we start Python programming, we need to have an interpreter to interpret and run our programs. There are certain online interpreters that can be used to start Python without installing an interpreter.

Python Indentation: Indentation refers to the spaces at the beginning of a code line. Where in other programming languages the indentation in code is for readability only, the indentation in Python is very important.

Python uses indentation to indicate a block of code.

Example:

```
if 5 > 2: print("Five is greater
than two!")
```

Python Variables

In Python, variables are created when you assign a value to it:

Example:

```
x = 5
y = "Hello, World!"
```

Python has no command for declaring a variable.

Variables are containers for storing data values

Creating Variables

Python has no command for declaring a variable.

A variable is created the moment you first assign a value to it.

Example:

```
x = 5 y =
"John"
print(x)
print(y)
```

Variables do not need to be declared with any particular *type*, and can even change type after they have been set.

Comments

Python has commenting capability for the purpose of in-code documentation.

Comments start with a #, and Python will render the rest of the line as a comment.

Creating a Comment

Comments starts with a #, and Python will ignore them.

Comments can be placed at the end of a line, and Python will ignore the rest of the line.

Example:

```
#This is a comment. print("Hello,
World!")
```

Multi Line Comments

Python does not really have a syntax for multi line comments.

To add a multiline comment you could insert a # for each line:

Example:

```
"""
```

```
This is a comment written in more
than just one line
"""
print("Hello, World!")
```

Variable Names

A variable can have a short name (like x and y) or a more descriptive name (age, carname, total_volume). Rules for Python variables:

- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive (age, Age and AGE are three different variables)

Example:

Legal variable names:

```
myvar = "John"
my_var = "John"
_my_var = "John"
myVar = "John"
MYVAR = "John"
myvar2 = "John"
```

Example:

Illegal variable names:

```
2myvar = "John"
my-var = "John"
my var = "John"
```

Output Variables

The Python print() function is often used to output variables.

Example:

```
x = "Python is awesome" print(x)
```

In the print() function, you output multiple variables, separated by a comma

You can also use the + operator to output multiple variables

For numbers, the + character works as a mathematical operator

In the print() function, when you try to combine a string and a number with the + operator, Python will give you an error

The best way to output multiple variables in the print() function is to separate them with commas, which even support different data types.

Global Variables

Variables that are created outside of a function (as in all of the examples above) are known as global variables.

Global variables can be used by everyone, both inside of functions and outside.

Example:

Create a variable outside of a function, and use it inside the function

```
x = "awesome" def myfunc():
  print("Python is " + x) myfunc()
```

If you create a variable with the same name inside a function, this variable will be local, and can only be used inside the function. The global variable with the same name will remain as it was, global and with the original value.

Example:

Create a variable inside a function, with the same name as the global variable

```
x = "awesome" def myfunc(): x = "fantastic"  print("Python is " + x)
myfunc() print("Python is " + x)
```

Python Datatypes

In programming, data type is an important concept.

Variables can store data of different types, and different types can do different things.

Built-In Datatypes

Python has the following data types built-in by default, in these categories:

Text Type:	str
Numeric Types:	int, float, complex
Sequence Types:	list, tuple, range
Mapping Type:	dict
Set Types:	set, frozenset
Boolean Type:	bool
Binary Types:	bytes, bytearray, memoryview
None Type:	NoneType

Getting the Data Type

You can get the data type of any object by using the type() function:

Example:

Print the data type of the variable x:

x= 5 print(type(x))

Python Lists

- Lists are used to store multiple items in a single variable.
- Lists are one of 4 built-in data types in Python used to store collections of data, the other 3 are Tuple, Set, and Dictionary, all with different qualities and usage.
- Lists are created using square brackets:

Example:

Create a List:

thislist=["apple", "banana", "cherry"] print(thislist)

Allow Duplicates

Since lists are indexed, lists can have items with the same value:

Example:

Lists allow duplicate values:

thislist=["apple", "banana", "cherry", "apple", "cherry"] print(thislist)

List Length

To determine how many items a list has, use the len() function:

Example:

Print the number of items in the list:

thislist=["apple", "banana", "cherry"] print(len(thislist))

The list() Constructor

It is also possible to use the list() constructor when creating a new list.

Example:

thislist=list(("apple", "banana", "cherry")) # note the double round-brackets print(thislist)

Python Tuples

- Tuples are used to store multiple items in a single variable.
- Tuple is one of 4 built-in data types in Python used to store collections of data, the other 3 are List, Set, and Dictionary, all with different qualities and usage.
- A tuple is a collection which is ordered and **unchangeable**.
- Tuples are written with round brackets. **Example:**

```
thistuple=("apple", "banana", "cherry") print(thistuple)
```

Allow Duplicates

Since tuples are indexed, they can have items with the same value:

Example:

```
thistuple=("apple", "banana", "cherry", "apple", "cherry")
print(thistuple)
```

Tuple Length

To determine how many items a tuple has, use the len() function:

Example:

Print the number of items in the tuple:

```
thistuple=("apple", "banana", "cherry") print(len(thistuple))
```

The tuple() Constructor

It is also possible to use the tuple() constructor to make a tuple.

Example:

```
thistuple=tuple(("apple", "banana", "cherry"))  print(thistuple)
```

Python Sets

- Sets are used to store multiple items in a single variable.
- Set is one of 4 built-in data types in Python used to store collections of data, the other 3 are List, Tuple, and Dictionary, all with different qualities and usage.
- A set is a collection which is *unordered*, *unchangeable*, and *unindexed*.
- Sets are written with curly brackets. **Example:**

```
thisset={"apple", "banana", "cherry"} print(thisset)
```

Duplicates Not Allowed

Sets cannot have two items with the same value.

Example:

```
thisset={"apple", "banana", "cherry", "apple"}

print(thisset)
```

Get the Length of a Set

To determine how many items a set has, use the len() function.

Example:

```
thisset={"apple", "banana", "cherry"}

print(len(thisset
```

The set() Constructor

It is also possible to use the set() constructor to make a set.

Example:

```
thisset=set(("apple", "banana", "cherry")) # note the double round-brackets
print(thisset)
```

Python Dictionaries

- Dictionaries are used to store data values in key:value pairs.
- A dictionary is a collection which is ordered*, changeable and do not allow duplicates.
- Dictionaries are written with curly brackets, and have keys and values **Example:**

```
thisdict = {  "brand":
"Ford",
  "model": "Mustang",
  "year": 1964
} print(thisdict)
```

Duplicates Not Allowed

Dictionaries cannot have two items with the same key: **Example:**

```
thisdict = {
"brand": "Ford",
  "model": "Mustang",
  "year": 1964,
  "year": 2020
} print(thisdict)
```

Dictionary Length

To determine how many items a dictionary has, use the len() function:

Example:

```
print(len(thisdict))
```

The dict() Constructor

It is also possible to use the dict() constructor to make a dictionary.

Example:

```
thisdict= dict(name= "John",age= 36,country= "Norway") print(thisdict)
```

Python Classes and Objects

- Python is an object oriented programming language.
- Almost everything in Python is an object, with its properties and methods.
- A Class is like an object constructor, or a "blueprint" for creating objects.

Create a Class

To create a class, use the keyword class:

Example:

```
class    MyClass:
x = 5
```

Create Object

Now we can use the class named MyClass to create objects:

Example:

```
p1=MyClass() print(p1.x)
```

The__init_() Function

The examples above are classes and objects in their simplest form, and are not really useful in real life applications.

To understand the meaning of classes we have to understand the built-in __init_() function.

All classes have a function called __init_(), which is always executed when the class is being initiated.

Use the __init_() function to assign values to object properties, or other operations that are necessary to do when the object is being created.

Example:

Create a class named Person, use the __init_() function to assign values for name and age:

```
class Person:
  def__init_(self,name,age):
    self.name=name
self.age=age
p1=Person("John", 36)
print(p1.name) print(p1.age)
```

Object Methods

Objects can also contain methods. Methods in objects are functions that belong to the object.

Let us create a method in the Person class:

Example:

Insert a function that prints a greeting, and execute it on the p1 object:

```
class Person:  def
__init_(self,name,age):
self.name=name
  self.age=age

 def myfunc(self):
   print("Hellomynameis" +self.name)

p1=Person("John", 36) p1.myfunc()
```

The self Parameter

The self parameter is a reference to the current instance of the class, and is used to access variables that belongs to the class.

It does not have to be named self , you can call it whatever you like, but it has to be the first parameter of any function in the class:

Example:
```
class Person:  def
__init_(mysillyobject,name,age):
mysillyobject.name=name
mysillyobject.age=age def
myfunc(abc):
   print("Hellomynameis" +abc.name)

p1=Person("John", 36) p1.myfunc()
```

CHAPTER 2

TRAINING WORK UNDERTAKEN

PROJECT- TRAIN TICKETING SYSTEM

2.1 Project Code

```
from tkinter import*
from tkinter import Tk, StringVar, ttk
from tkinter import messagebox
import random
import time;
import datetime

root= Tk()
root.geometry("1350x750+0+0")
root.title ("Train Ticket")
root.configure (background='#C2DFFF')

Tops= Frame (root, width= 1350, height =100, bd=14, relief ='raise')
Tops.pack(side=TOP)

f1= Frame (root, width= 900, height =650, bd=8, relief ='raise')
f1.pack (side=LEFT)
f2=Frame (root , width=440, height=650, bd=8, relief="raise")
f2.pack (side=RIGHT)

frametopRight=Frame (f2, width=440, height=650, bd=12, relief="raise")
frametopRight.pack (side=TOP)
frameBottomRight=Frame (f2, width=440, height=50, bd=16, relief="raise")
frameBottomRight.pack (side=BOTTOM)

f1a=Frame (f1, width=900, height=330, bd=8, relief="raise")
f1a.pack (side =TOP)
f2a=Frame (f1, width=900, height=320, bd=6, relief="raise")
f2a.pack (side=BOTTOM)

topLeft1=Frame (f1a, width=300, height=200, bd=16, relief="raise")
topLeft1.pack(side=LEFT)
topLeft2=Frame (f1a, width=300, height=200, bd=16, relief="raise")
topLeft2.pack(side=RIGHT)
topLeft3=Frame (f1a, width=300, height=200, bd=16, relief="raise")
topLeft3.pack(side=RIGHT)
#-----------------------------------------------------------------------------------------------------------------
bottomLeft1=Frame (f2a, width=450, height=450, bd=14, relief="raise")
bottomLeft1.pack (side=LEFT)
```

```
bottomLeft2=Frame (f2a, width=450, height=450, bd=14, relief="raise")
bottomLeft2.pack (side=RIGHT)
#-------------------------------------------------------------------------------------------------
Tops.configure(background='#3BB9FF')
f1.configure(background='#3BB9FF')
f2.configure(background='#3BB9FF')
lblTitle=Label(Tops,font=('arial',40,'bold'),text="Train Ticketing Systems", bd=10, width=41 ,
justify='center')
lblTitle.grid(row=0, column=0)

Date1= StringVar()
time1= StringVar()
Ticketclass= StringVar()
TicketPrice= StringVar()
Child_Ticket= StringVar()
Adult_Ticket= StringVar()
From_Destination= StringVar()
To_Destination= StringVar()
Fee_Price= StringVar()
Route= StringVar()
Receipt_Ref= StringVar()

Ticketclass.set ("")
TicketPrice.set ("")
Child_Ticket.set ("")
Adult_Ticket.set("")
From_Destination.set ("")
To_Destination.set ("")
Fee_Price.set ("")
Route.set ("")
Receipt_Ref.set ("")
#-------------------------------------------------------------------------------------------------
lblReceipt=Label(frametopRight,font=('arial',18,'bold'),text="\nTravelling Ticketing Systems\n",
bd=10,
width=25,justify='center')
lblReceipt.grid(row=0, column=0)

lblClass1=Label(frameBottomRight,font=('arial',14,'bold'),text="Class", width=8, relief='sunken',
justify='center')
lblClass1.grid(row=0, column=0 )

lblClass2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=Ticketclass,justify='center')
lblClass2.grid(row=1, column=0)

lblTicket1=Label(frameBottomRight,font=('arial',14,'bold'),text="Ticket",width=8, relief='sunken',
justify='center')
```

```
lblTicket1.grid(row=0, column=1)

lblTicket2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=TicketPrice,justify='center')
lblTicket2.grid(row=1, column=1)

lblAdult1=Label(frameBottomRight,font=('arial',14,'bold'),text="Adult",  width=8,relief='sunken',
justify='center')
lblAdult1.grid(row=0, column=2)

lblAdult2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=Adult_Ticket,justify='center')
lblAdult2.grid(row=1, column=2)

lblChild1=Label(frameBottomRight,font=('arial',14,'bold'),text="Child",  width=8,relief='sunken',
justify='center')
lblChild1.grid(row=0, column=3)

lblChild2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=Child_Ticket,justify='center')
lblChild2.grid(row=1, column=3)
#-------------------------------------------------------------------------------------------
lblsp=Label(frameBottomRight,font=('arial',14,'bold'),  width=34, height=2,relief='sunken',
justify='center')
lblsp.grid(row=2, column=0,columnspan=4)
#-------------------------------------------------------------------------------------------
lblFrom1=Label(frameBottomRight,font=('arial',14,'bold'),text="From",width=8, relief='sunken',
justify='center')
lblFrom1.grid(row=3, column=1)

lblFrom2=Label(frameBottomRight,font=('arial',14,'bold'),width=8, relief='sunken',
textvariable=From_Destination,justify='center')
lblFrom2.grid(row=3, column=2)
#-------------------------------------------------------------------------------------------
lblTo1=Label(frameBottomRight,font=('arial',14,'bold'),text="To",width=8, relief='sunken',
justify='center')
lblTo1.grid(row=4, column=1)

lblTo2=Label(frameBottomRight,font=('arial',14,'bold'),width=8, relief='sunken',
textvariable=To_Destination,justify='center')
lblTo2.grid(row=4, column=2)

lblPrice1=Label(frameBottomRight,font=('arial',14,'bold'),text="Price",  width=8, relief='sunken',
justify='center')
lblPrice1.grid(row=5, column=1)

lblPrice2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=Fee_Price,justify='center')
```

```
lblPrice2.grid(row=5, column=2)
#--------------------------------------------------------------------------------------------------
lblsp=Label(frameBottomRight,font=('arial',14,'bold'),  width=34, height=2,relief='sunken',
justify='center')
lblsp.grid(row=6, column=0,columnspan=4)
#--------------------------------------------------------------------------------------------------
lblRefNo1=Label(frameBottomRight,font=('arial',14,'bold'),text="RefNo",
width=8,relief='sunken',
justify='center')
lblRefNo1.grid(row=7, column=0)

lblRefNo2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=Receipt_Ref,justify='center')
lblRefNo2.grid(row=8, column=0)

lblTime1=Label(frameBottomRight,font=('arial',14,'bold'),text="Time",  width=8,relief='sunken',
justify='center')
lblTime1.grid(row=7, column=1)

lblTime2=Label(frameBottomRight,font=('arial',14,'bold'), width=8, relief='sunken',
textvariable=time1,justify='center')
lblTime2.grid(row=8, column=1)

lblDate1=Label(frameBottomRight,font=('arial',14,'bold'),text="Date",width=8, relief='sunken',
justify='center')
lblDate1.grid(row=7, column=2)

lblDate2=Label(frameBottomRight,font=('arial',14,'bold'),width=8,
relief='sunken',textvariable=Date1,
justify='center')
lblDate2.grid(row=8, column=2)

lblRoute1=Label(frameBottomRight,font=('arial',14,'bold'),text="Route",width=8, relief='sunken',
justify='center')
lblRoute1.grid(row=7, column=3)

lblRoute2=Label(frameBottomRight,font=('arial',14,'bold'),width=8,
relief='sunken',textvariable=Route,
justify='center')
lblRoute2.grid(row=8, column=3)
#----------------------------------------Function----------------------------------------------------
def btnClick(numbers):
global operator
operator = operator + str(numbers)
    text_Input.set(operator)

def btnClearDisplay():
global operator
```

```
    operator=""
    text_Input.set("")

def btnEqualsInput():
global operator
sumup =str(eval(operator))
    text_Input.set(sumup)
    operator=""

def iExit():
qExit= messagebox .askyesno("Quit System ","Do you want to quit?")
if qExit > 0:
root.destroy()
return

def Travel_Cost():
if (var9.get()== "Amritsar" and var1.get()== 1 and var4.get()== 1):
        TCost=float (160)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Amritsar" and var1.get() == 1 and var5.get()== 1) :
        TCost = float(140)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Child_Fees)
```

```
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var1.get()== 1 and var4.get()== 1):
        TCost=float (230)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var1.get() == 1 and var5.get()== 1) :
        TCost = float(210)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
```

```
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var1.get()== 1 and var4.get()== 1):
        TCost=float (160)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var1.get() == 1 and var5.get()== 1) :
        TCost = float(140)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")
```

```
        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var1.get()== 1 and var4.get()== 1):
        TCost=float (120)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var1.get() == 1 and var5.get()== 1) :
        TCost = float(90)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)
```

```
elif (var9.get()== "Jalandhar" and var1.get()== 1 and var4.get()== 1):
        TCost=float (170)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Jalandhar" and var1.get() == 1 and var5.get()== 1) :
        TCost = float(140)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Standard")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Amritsar" and var2.get()== 1 and var4.get()== 1):
        TCost=float (310)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
```

```
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Amritsar" and var2.get() == 1 and var5.get()== 1) :
        TCost = float(290)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var2.get()== 1 and var4.get()== 1):
        TCost=float (380)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
```

```
        Ticketclass.set ("Economy")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var2.get() == 1 and var5.get()== 1) :
        TCost = float(360)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var2.get()== 1 and var4.get()== 1):
        TCost=float (310)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
```

```
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var2.get() == 1 and var5.get()== 1) :
        TCost = float(290)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var2.get()== 1 and var4.get()== 1):
        TCost=float (270)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
```

```
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var2.get() == 1 and var5.get()== 1) :
        TCost = float(240)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Jalandhar" and var2.get()== 1 and var4.get()== 1):
        TCost=float (320)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
```

```
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Jalandhar" and var2.get() == 1 and var5.get()== 1) :
        TCost = float(290)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("Economy")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Amritsar" and var3.get()== 1 and var4.get()== 1):
        TCost=float (460)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Amritsar" and var3.get() == 1 and var5.get()== 1) :
        TCost = float(440)
```

```
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Amritsar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var3.get()== 1 and var4.get()== 1):
        TCost=float (530)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Delhi" and var3.get() == 1 and var5.get()== 1) :
        TCost = float(510)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
```

```
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Delhi")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var3.get()== 1 and var4.get()== 1):
        TCost=float (460)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Ambala" and var3.get() == 1 and var5.get()== 1) :
        TCost = float(440)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Child_Fees)
```

```
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Ambala")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var3.get()== 1 and var4.get()== 1):
        TCost=float (420)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Firozpur" and var3.get() == 1 and var5.get()== 1) :
        TCost = float(390)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Firozpur")
```

```
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Jalandhar" and var3.get()== 1 and var4.get()== 1):
        TCost=float (470)
        Single=float (var12.get())
        Adult_Tax="₹",str('%.2f'%((TCost*Single)*0.03))
        Adult_Fees="₹", str('%.2f'%(TCost*Single) )
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ ((TCost * Single) *0.03)))
        Tax.set (Adult_Tax)
        SubTotal.set (Adult_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Adult_Fees)
        Child_Ticket.set ("No")
        Adult_Ticket.set("Yes")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")

        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)

elif (var9.get()== "Jalandhar" and var3.get() == 1 and var5.get()== 1) :
        TCost = float(440)
        Single=float(var12.get())
        Child_Tax ="₹", str('%.2f'%(TCost *0))
        Child_Fees ="₹", str('%.2f'%(TCost*Single))
        TotalCost ="₹",str('%.2f'%((TCost * Single)+ (TCost*0)))
        Tax.set (Child_Tax)
        SubTotal.set (Child_Fees)
        Ticketclass.set ("First Class")
        TicketPrice.set (Child_Fees)
        Child_Ticket.set ("Yes")
        Adult_Ticket.set("No")
        From_Destination.set ("Ludhiana")
        To_Destination.set ("Jalandhar")
        Fee_Price.set (TotalCost)
        Total.set (TotalCost)
        Route.set ("Direct")
```

```
        x=random. randint (109, 5876)
randomRef=str (x)
        Receipt_Ref.set ("TFL"+randomRef)


def chkbutton_value ():
if(var10.get () == 1):
        var12.set ("")
        entSingle.configure (state= NORMAL)

elif var10.get ()== 0:
        entSingle.configure (state=DISABLED)
        var12.set ("0")
if(var11.get () == 1):
        var6.set ("")
        entReturn.configure (state= NORMAL)

elif var11.get ()== 0:
        entReturn.configure (state=DISABLED)
        var6.set ("0")


def Reset():
Tax.set("0")
var1.set("0")
var2.set("0")
var3.set("0")
var4.set("0")
var5.set("0")
var6.set("0")
var7.set("0")
var8.set("0")
var9.set("0")
var10.set("0")
var11.set("0")
var12.set("0")
SubTotal.set("0")
Total.set("0")
Ticketclass.set("")
TicketPrice.set("")
    Child_Ticket.set("")
    Adult_Ticket.set("")
    From_Destination.set("")
    To_Destination.set("")
    Fee_Price.set("")
#----------------------------------------Variables--------------------------------------------
var1 = IntVar()
var2 = IntVar()
```

```
var3 = IntVar()
var4 = IntVar()
var5 = IntVar()
var6 = StringVar()
var7 = StringVar()
var8 = StringVar()
var9 = StringVar()
var10 = IntVar()
var11 = IntVar()
var12= IntVar()
Tax = StringVar()
var1.set("0")
var2.set("0")
var3.set("0")
var4.set("0")
var5.set("0")
var6.set("0")
var7.set("0")
var8.set("0")
var9.set("0")
var10.set("0")
var11.set("0")
var12.set("0")
SubTotal = StringVar()
Total = StringVar()
text_Input= StringVar()
operator=""
#-----------------------------------------Date & Time-----------------------------------------------
Date1.set(time.strftime("%d/%m/%Y"))
time1.set(time.strftime('%H:%M:%S'))
#-----------------------------------CreateWidget topleft1-----------------------------------
lblClass=Label(topLeft1, font=('arial',22, 'bold'), text='Class',bd=8)
lblClass.grid(row=0, column=0 ,sticky=W)
chkStandard=Checkbutton(topLeft1, font=('arial',20, 'bold'), text='Standard' ,variable=var1,
onvalue=1,
offvalue=0)
chkStandard.grid(row=1, column=0, sticky=W)
chkEconomy=Checkbutton (topLeft1, font=('arial', 20, 'bold'), text='Economy', variable=var2,
onvalue=1,
offvalue=0)
chkEconomy.grid(row=2, column=0, sticky=W)
chkFirstClass=Checkbutton(topLeft1,font=('arial',20,'bold'),text='First
Class',variable=var3,onvalue=1,
offvalue=0)
chkFirstClass.grid (row=3,column=0 ,sticky=W)
#-----------------------------------CreateWidget topleft2-----------------------------------
lblSelect=Label (topLeft3, font=('arial',20, 'bold'), text=' Destination Selector',bd=8)
lblSelect. grid(row=0, column=0 ,sticky=W, columnspan=2)
```

```
lblDestination=Label (topLeft3, font=('arial',20, 'bold'), text='Destination',bd=2)
lblDestination. grid(row=1, column=0 ,sticky=W)
cboDestination=ttk.Combobox (topLeft3 ,textvariable=var9, state='readonly', font=('arial',20,
'bold'),
width=8)
cboDestination['value']=('','Amritsar','Delhi','Ambala','Firozpur','Jalandhar')
cboDestination.current(0)
cboDestination.grid(row=1,column=1)

chkAdult =Checkbutton (topLeft3, font=('arial', 20, 'bold'), text='Adult', variable=var4, onvalue=1,
offvalue=0)
chkAdult.grid(row=2, column=0, sticky=W)
chkChild=Checkbutton (topLeft3, font= ('arial',20,'bold'), text='Child', variable=var5, onvalue=1,
offvalue=0)
chkChild.grid (row=3,column=0 ,sticky=W)
#-----------------------------------------Ticket-------------------------------------------------------------
lblClass = Label(topLeft2, font=('arial',22, 'bold'), text='Ticket Type',bd=8)
lblClass.grid(row=0, column=0 ,sticky=W)
chkSingle=Checkbutton(topLeft2, font=('arial',20, 'bold'), text='Single' ,variable=var10,
onvalue=1 ,offvalue=0,command=chkbutton_value)
chkSingle.grid(row=1, column=0, sticky=W)
entSingle=Entry(topLeft2,font=('arial',20,'bold'),textvariable=var12,bd=2,width=8,state=DISABL
ED)
entSingle.grid(row=1,column=1,sticky=W)
chkReturn=Checkbutton (topLeft2, font=('arial', 20, 'bold'), text='Return', variable=var11,
onvalue=1, offvalue=0,command=chkbutton_value)
chkReturn.grid(row=2, column=0, sticky=W)
entReturn=Entry(topLeft2,font=('arial',20,'bold'),textvariable=var6,bd=2,width=8,state=DISABLE
D)
entReturn.grid(row=2,column=1,sticky=W)
lblComment = Label(topLeft2, font=('arial',22, 'bold'), text='Comment',bd=8)
lblComment.grid(row=3, column=0 ,sticky=W)
entComment=Entry(topLeft2,font=('arial',20,'bold'),textvariable=var7,bd=2,width=8)
entComment.grid(row=3,column=1,sticky=W)
#-------------------------------------Calculator-------------------------------------------------------
text_Input=StringVar()
txtDisplay = Entry (bottomLeft2, font= ('arial', 10, 'bold'), textvariable=text_Input, bd=16,
justify='right',width=36)
txtDisplay.grid (columnspan=4)
btn7=Button (bottomLeft2,padx=8,pady=8,bd=8,fg="Black",font=('arial', 10, 'bold'),
text="7",command=lambda:btnClick(7),width=4).grid(row=2,column=0)
btn8=Button (bottomLeft2,padx=8,pady=8,bd=8,fg="Black",font=('arial',10, 'bold'),
text="8",command=lambda:btnClick(8),width=4).grid(row=2,column=1)
btn9=Button (bottomLeft2,padx=8,pady=8,bd=8,fg="Black",font=('arial',10, 'bold'),
text="9",command=lambda:btnClick(9),width=4).grid(row=2,column=2)

Addition=Button (bottomLeft2,padx=8,pady=8,bd=8,fg="Black",font=('arial',10, 'bold'),
text="+",command=lambda:btnClick('+'),width=4).grid(row=2,column=3)
```

```
btn4=Button(bottomLeft2,padx=8,pady=8,bd=8 ,fg="Black",font= ('arial', 10, 'bold'),
text="4",command=lambda:btnClick(4),width=4).grid(row=3, column=0)
btn5=Button(bottomLeft2,padx=8,pady=8,bd=8 ,fg="Black",font= ('arial', 10, 'bold'),
text="5",  command=lambda:btnClick(5),width=4).grid(row=3, column=1)
btn6=Button(bottomLeft2,padx=8,pady=8,bd=8 ,fg="Black",font= ('arial', 10, 'bold'),
text="6",  command=lambda:btnClick(6),width=4).grid(row=3, column=2)

Subtraction=Button(bottomLeft2,padx=8,pady=8, bd=8, fg="Black", font=('arial', 10, 'bold'),
text="-",command=lambda:btnClick('-'),width=4).grid(row=3,column=3)

btn1=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="1",  command=lambda:btnClick(1),width=4).grid(row=4, column=0)
btn2=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="2",  command=lambda:btnClick(2),width=4).grid(row=4, column=1)
btn3=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="3",  command=lambda:btnClick(3),width=4).grid(row=4, column=2)

Multiply=Button(bottomLeft2, padx=8,pady=8, bd=8, fg="Black", font=('arial', 10, 'bold'),
text='*',command=lambda:btnClick('*'),width=4).grid(row=4,column=3)


btn0=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="0",  command=lambda:btnClick(0),width=4).grid(row=5, column=0)
btnClear=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="C", width=4, command=btnClearDisplay).grid(row=5, column=1)
btnEquals=Button(bottomLeft2, padx=8, pady=8, bd=8 , fg="Black", font= ('arial', 10, 'bold'),
text="=", width=4, command=btnEqualsInput).grid(row=5, column=2)
Division=Button(bottomLeft2, padx=8,pady=8, bd=8, fg="Black", font=('arial', 10, 'bold'),
text='/',command=lambda:btnClick('/'),width=4).grid(row=5,column=3)
#----------------------------------Tax,subtotal and Total-------------------------------------------
lblStateTax=Label(bottomLeft1,font=('arial',24,'bold'), text="State Tax", bd=16, anchor='w')
lblStateTax.grid(row=3,column=2)

txtStateTax=Entry(bottomLeft1,font=('arial',16, 'bold'),textvariable=Tax,bd=10,width=28,
bg="#ffffff", justify='right')
txtStateTax.grid(row=3,column=3)

lblSubTotal=Label(bottomLeft1, font=('arial', 24, 'bold'),text="Sub Total", bd=16, anchor='w')
lblSubTotal.grid(row=4,column=2)
txtSubTotal=Entry(bottomLeft1,font=('arial',16, 'bold'),textvariable=SubTotal,bd=10,width=28,
bg="#ffffff", justify='right')
txtSubTotal. grid(row=4,column=3)

lblTotalCost=Label(bottomLeft1, font=('arial', 24, 'bold'),text="Total Cost", bd=16, anchor='w')
lblTotalCost.grid(row=5,column=2)

txtTotalCost=Entry(bottomLeft1,font=('arial',16, 'bold'),textvariable=Total,bd=10,width=28,
```

```
bg="#ffffff", justify='right')
txtTotalCost. grid(row=5,column=3)
#--------------------------------------------Space-----------------------------------------------
lblsp=Label(bottomLeft1,font=('arial', 14, 'bold'), width = 44, height=2, relief = 'sunken',
justify='center')
lblsp.grid(row=6, column=0,columnspan=4)

lblSpace=Label(bottomLeft1, font=('arial', 24, 'bold'),text="    \n          ", bd=16, anchor='w')
lblSpace.grid(row=6,column=2)

lblSpace=Label(bottomLeft2, font=('arial', 24, 'bold'),text="    \n          ", bd=16, anchor='w')
lblSpace.grid(row=6,columnspan=4)
#--------------------------------------------Space-----------------------------------------------
lblsp=Label(frameBottomRight,font=('arial', 14, 'bold'), width = 34, height=1, relief = 'sunken',
justify='center')
lblsp.grid(row=9, column=0,columnspan=4)
#--------------------------------------------Button----------------------------------------------
btnTotal = Button (frameBottomRight, text='Total', padx=2, pady=2, bd=2, fg="Black",
font=('arial', 12, 'bold'), width= 6, height=1,
command=Travel_Cost).grid(row=10,column=0)
btnclear = Button (frameBottomRight, text='Clear', padx=2, pady=2, bd=2, fg="Black",
font=('arial', 12, 'bold'), width= 6, height=1,
command= Reset).grid (row= 10, column=1)
btnReset = Button (frameBottomRight, text='Reset', padx=2, pady=2, bd=2, fg='Black',
font=('arial', 12,'bold'), width= 6, height=1,
command= Reset) .grid (row=10, column=2)
btnExit = Button (frameBottomRight, text='Exit', padx=2, pady=2, bd=2, fg="Black",
font=('arial', 12,'bold'), width= 6, height=1,
command= iExit) .grid (row=10, column=3)
#-----------------------------------------------------------------------------------------------
lblsp=Label(frameBottomRight,font=('arial', 14, 'bold'), width = 34, height=2, relief = 'sunken',
justify='center')
lblsp.grid(row=11, column=0,columnspan=4)

root.mainloop()
```

CHAPTER 3

RESULTS

PROJECT- TRAIN TICKETING SYSTEM

3.1 Train Ticketing System

Train Ticketing System is a python based project. I have developed Train Ticketing System using tkinter package. The main modules available in this project are Class (Standard, Economy, and First Class), Destination Selector, and Ticket Type along with applicable taxes. It is very easy to use and understand. This simple console based Ticket Reservation system provides one of the simplest reservations of ticket. There is no database connection in this mini project to save user's data permanently and retrieve it. In order to run the project, you must have installed Python, on your PC.

3.2 Results Obtained

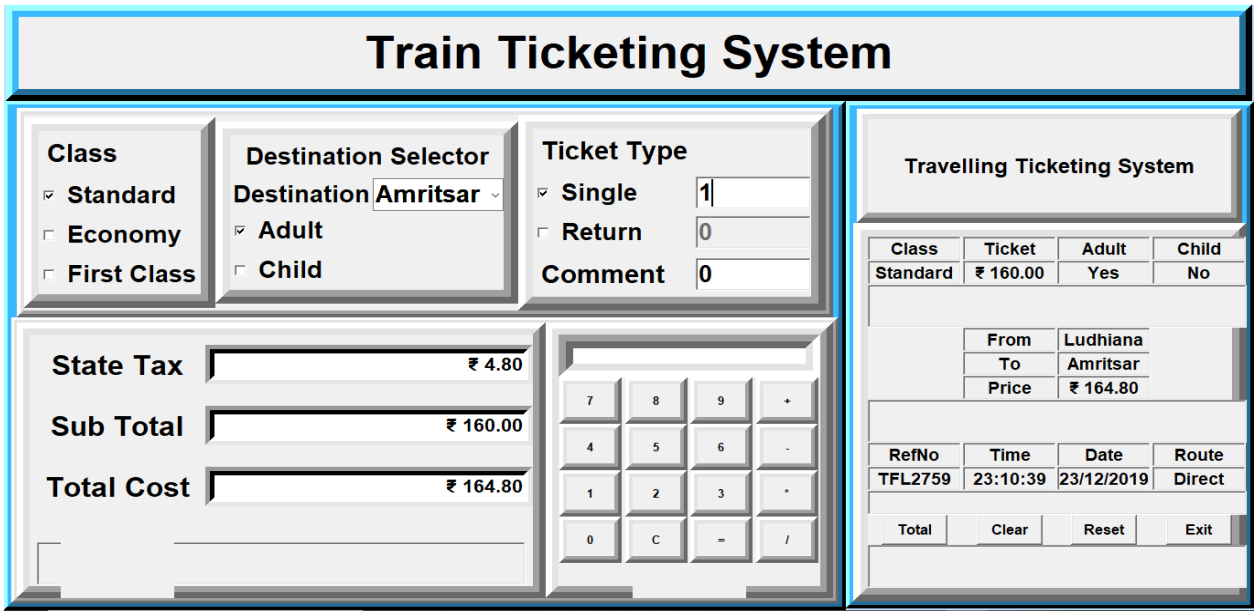

Figure3.1

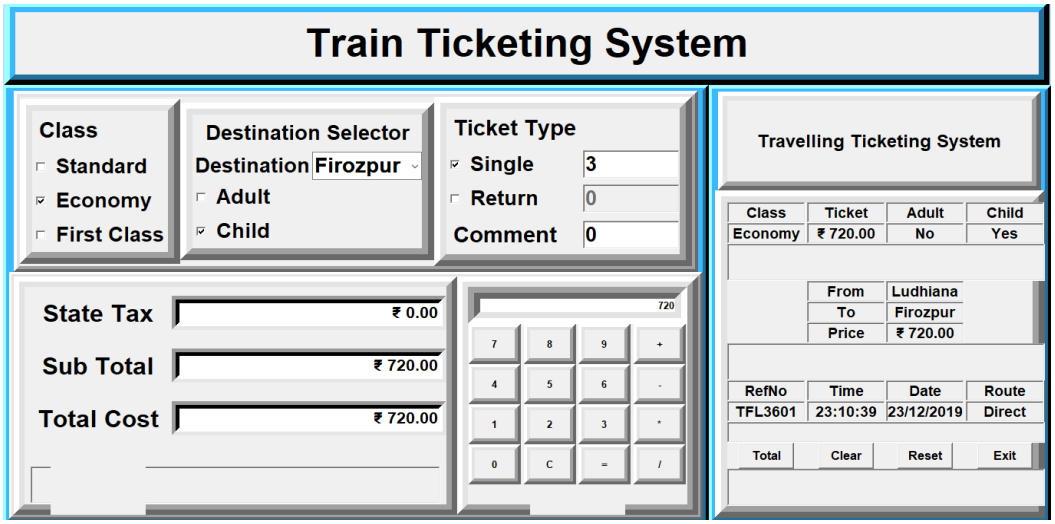

Figure3.2

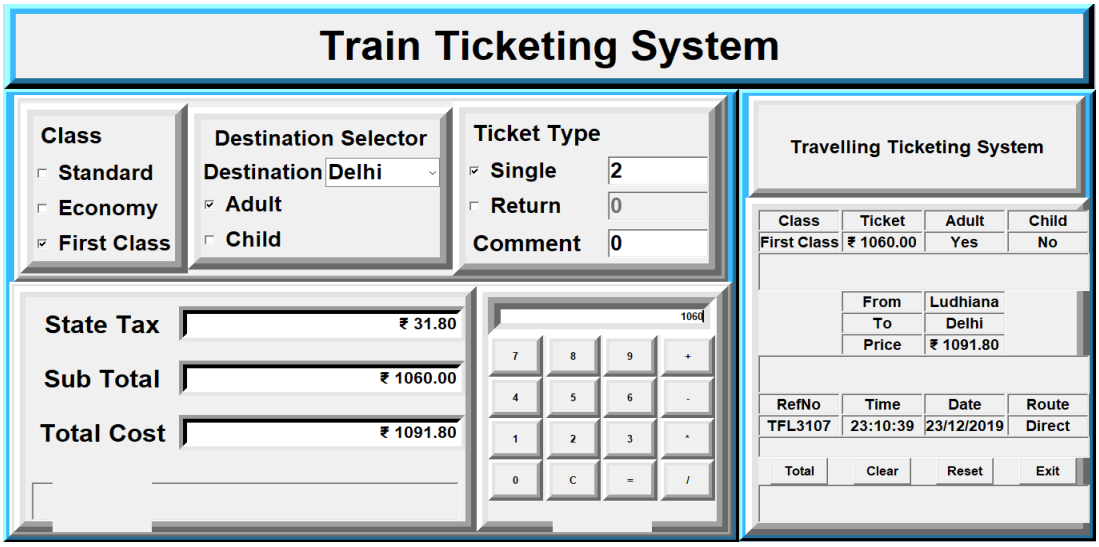

Figure3.3

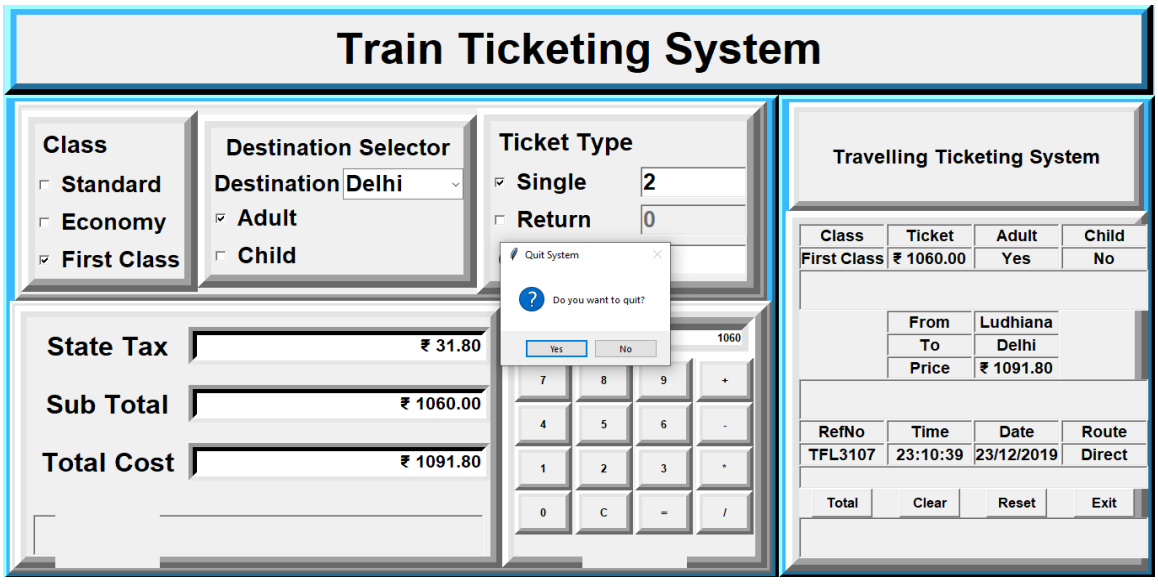

Figure3.4

CHAPTER 4
CONCLUSION

Python as the principle teaching language:

Is is free (as in both cost and source code).

It is flexible tool that allows both the teaching of traditional procedural programming and modem OOP. It can be used to teach a large number of transferable skills;

It is a real world programming language that can be and is used in academia and the commercial world;

It appears to be quicker to learn and, in combination with its many libraries, this offers the possibility of more rapid student development allowing the course to be made more challenging and varied;

It is trivial to install on a Windows PC allowing students to take their interest further. For many the hurdle of installing a Pascal or C compiler on a Windows machine is either too expensive or too complicated and most importantly, its clean syntax offers increased understanding and enjoyment for students