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Student Name

(KRISHNA BANSAL)

INTRODUCTION

The Online Quiz system is basically a GUI & CSV-based project done with help of python language. this project is very useful for the School and Colleges to maintain record of student's regular progress in each subject. This project is multifield project, so that it can be modified for various purposes.

OBJECTIVES OF THE PROJECT

The objective of this project is to let the students apply the programming knowledge into a real- world situation/problem and exposed the students how programming skills helps in developing a good software.

- Write programs utilizing modern software tools.
- Apply object-oriented programming principles effectively when developing small to medium sized projects.
- Write effective procedural code to solve small to medium sized problems.
- Students will demonstrate a breadth of knowledge in computer science, as exemplified in the areas of systems, theory and software development.

Students will demonstrate ability to conduct research or applied Informatics Practices project, requiring writing and presentation skills which exemplify scholarly style in the field of computer science.

PROPOSED SYSTEM

Today one cannot afford to rely on the fallible human beings of be really wants to stand against today’s merciless competition where not to wise saying “to err is human” no longer valid, it’s outdated to rationalize your mistake. So, to keep pace with time, to bring about the best result without malfunctioning and greater efficiency so to replace the unending heaps of flies with a much-sophisticated hard disk of the computer.

One has to use the data management software. Software has been an ascent in atomization various organisations. Many software products working are now in markets, which have helped in making the organizations work easier and efficiently. Data management initially had to maintain a lot of ledgers and a lot of paper work has to be done but now software product on this organization has made their work faster and easier. Now only this software has to be loaded on the computer and work can be done.

This prevents a lot of time and money. The work becomes fully automated and any information regarding the organization can be obtained by clicking the button. Moreover, now it’s an age of computers of and automating such an organization gives the better look.

HARDWARE AND SOFTWARE REQUIREMENTS

I. OPERATING SYSTEM	:	WINDOWS 10 AND ABOVE
II. PROCESSOR	:	PENTIUM DUAL CORE OR ABOVE
		ATHALON (3800+- 4200+ DUAL CORE)
III. MOTHERBOARD	:	1.845 OR 915,995 FOR PENTIUM 0R MSI
		K9MM-V VIA K8M800+8237R PLUS
		CHIPSET FOR AMD ATHALON
IV. PROGRAMMING LANGUAGE	:	PYTHON 3.3.7 OR ABOVE
V. DATABASE	:	MySQL 5.5.27 OR ABOVE

TECHNOLOGY USED

Python

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation.

Python is dynamically-typed and garbage-collected. It supports multiple programming paradigms, including structured (particularly procedural), object-oriented and functional programming.

Guido van Rossum began working on Python in the late 1980s as a successor to the ABC

programming language and first released it in 1991 as Python 0.9.0.

Python 2.0 was released in 2000 and introduced new features such as list comprehensions, cycle-detecting garbage collection, reference counting, and Unicode support. Python 3.0, released in 2008, was a major revision that is not completely backward-compatible with earlier versions. Python 2 was discontinued with version 2.7.18 in 2020.

Python is an interpreted, object-oriented, high-level programming language with dynamic semantics. Its high-level built-in data structures, combined with dynamic typing and dynamic binding, make it very attractive for Rapid Application Development, as well as for use as a scripting or glue language to connect existing components together. Python's simple, easy to learn syntax emphasizes readability and therefore reduces the cost of program maintenance.

Python supports modules and packages, which encourages program modularity and code reuse. The Python interpreter and the extensive standard library are available in source or binary form without charge for all major platforms, and can be freely distributed.

Python is used for:

- web development (server-side),
- software development,
- mathematics,
- system scripting.

What can Python do?

- ✓ Python can be used on a server to create web applications.
- ✓ Python can be used alongside software to create workflows.
- ✓ Python can connect to database systems. It can also read and modify files.
- ✓ Python can be used to handle big data and perform complex mathematics.
- ✓ Python can be used for rapid prototyping, or for production-ready software development.

Why Python?

- ✓ Python works on different platforms (Windows, Mac, Linux, Raspberry Pi, etc).
- ✓ Python has a simple syntax similar to the English language.
- ✓ Python has syntax that allows developers to write programs with fewer lines than some other programming languages.
- ✓ Python runs on an interpreter system, meaning that code can be executed as soon as it is written. This means that prototyping can be very quick.
- ✓ Python can be treated in a procedural way, an object-oriented way or a functional way.

It is possible to write Python in an Integrated Development Environment, such as Thonny, Pycharm, Netbeans or Eclipse which are particularly useful when managing larger collections of Python files.

Python Syntax compared to other programming languages

- Python was designed for readability, and has some similarities to the English language with influence from mathematics.
- Python uses new lines to complete a command, as opposed to other programming languages which often use semicolons or parentheses.
- Python relies on indentation, using whitespace, to define scope; such as the scope of loops, functions and classes. Other programming languages often use curly-brackets for this purpose.

MySQL

MySQL, the most popular Open Source SQL database management system, is developed, distributed, and supported by Oracle Corporation.

The MySQL website (http://www.mysql.com/) provides the latest information about MySQL software.

MySQL is a database management system.

A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or the vast amounts of information in a corporate network. To add, access, and process data stored in a computer database, you need a database management system such as MySQL Server. Since computers are very good at handling large amounts of data, database management systems play a central role in computing, as standalone utilities, or as parts of other applications.

MySQL databases are relational.

A relational database stores data in separate tables rather than putting all the data in one big storeroom. The database structures are organized into physical files optimized for speed. The logical model, with objects such as databases, tables, views, rows, and columns, offers a flexible programming environment. You set up rules governing the relationships between different data fields, such as one-to-one, one-to-many, unique, required or optional, and “pointers” between different tables. The database enforces these rules, so that with a well-designed database, your application never sees inconsistent, duplicate, orphan, out-of-date, or missing data.

The SQL part of “MySQL” stands for “Structured Query Language”. SQL is the most common standardized language used to access databases. Depending on your programming environment, you might enter SQL directly (for example, to generate reports), embed SQL statements into code written in another language, or use a language-specific API that hides the SQL syntax.

SQL is defined by the ANSI/ISO SQL Standard. The SQL standard has been evolving since 1986 and several versions exist. In this manual, “SQL-92” refers to the standard released in 1992, “SQL:1999” refers to the standard released in 1999, and “SQL:2003” refers to the current version of the standard. We use the phrase “the SQL standard” to mean the current version of the SQL Standard at any time.

MySQL software is Open Source.

Open Source means that it is possible for anyone to use and modify the software. Anybody can download the MySQL software from the Internet and use it without paying anything. If you wish, you may study the source code and change it to suit your needs. The MySQL software uses the GPL (GNU General Public License).

DATABASE USED

Comma Separated Values (C.S.V) File

CSV File Name: users.csv

example of users.csv

username	**password**
admin	admin@1234
omkaar	1234
Krishna Bansal	123456

CSV File Name: user_progress.csv

example of user_progress.csv

Username	Score	Subject
omkaar	7	Science
admin	9	History
Krishna Bansal	6	Current Affairs

CSV File Name: Krishna.csv

example of Krishna.csv

Subject	Question ID	Question	OptionA	OptionB	OptionC	OptionD	Correct Option
General knowledge	GEN01	What is the capital of France?	Paris	London	Berlin	Madrid	Option A
Science	SCI01	What is H2O commonly known as?	Salt	Water	Hydrogen	Oxygen	Option B
History	HIS01	Who was the first president of the United States?	George Washington	Thomas Jefferson	Abraham Lincoln	John Adams	Option A

SOURCE CODE

```
from tkinter import *

from tkinter import messagebox

import pandas as pd

import matplotlib.pyplot as plt

from PIL import Image,ImageTk




username=NONE




#helping Functions

def get_length(df,sub,user):

    id_df=df[(df['Subject']==sub) & (df['Username']==user)]

    length=len(id_df)

    ls=[j for j in range(1,length+1)]

    return ls


def get_subject(df,sub,user):

    Scoredf=df[(df['Subject']==sub) & (df['Username']==user)]

    Scoredf=Scoredf['Score']
    return Scoredf


def get_max(ls, df, user):
    results = []
    for index in range(len(ls)):
        Sub_max = df[(df['Subject'] == ls[index]) & (df['Username'] == user)]
        if not Sub_max.empty:
            results.append(max(Sub_max['Score']))
        else:
            results.append(0)  # Default score if no matching records
    return results



#Chart creating functions
def create_piechart(score):
    plt.pie([score,10-score],labels=["Right","Wrong"])
    plt.legend()
    plt.savefig('Images/piechart')
    plt.close()
```

```
def create_barchart(quiz_subjects,user_progress_data,username):

sub=["G.K","Science","Maths","History","Geo","Lit.","Tech","Sports",
"Ent.","Mytho","C.A","Pop Cul."]
    plt.barh(sub,get_max(quiz_subjects,user_progress_data,username))
    plt.yticks(fontsize=8)
    plt.ylabel('Subjects')
    plt.xlabel('Maximum Score')
    plt.savefig('Images/Barchart')
    plt.close()

def create_linechart(subject,user_progress_data,username):
    plt.plot(get_length(user_progress_data, subject, username),
get_subject(user_progress_data, subject, username), label=subject)
    plt.legend()
    plt.savefig('Images/LineChart')
    plt.close()



#button function & backend
def add_user(): #Signing Up and adding user in respective csv file
    global username
    username = signup_username_ent.get().strip()
    password = signup_password_ent.get().strip()

    if not username or not password:
        messagebox.showwarning('Fill the fields', 'Please enter both username and password.')
        return

    if username in user_pass_data['username'].values:
        messagebox.showinfo('Username already exists', f"Username '{username}' is already taken. Please choose a different one.")
    else:
        user_pass_data.loc[len(user_pass_data)] = [username, password]
        user_pass_data.to_csv('Data/users.csv', index=False)
        signup_username_ent.delete(0, END)
        signup_password_ent.delete(0, END)
        messagebox.showinfo('Success', 'User registered successfully!')
        show_frame(Login)


def login_user(): #Logingin in user
```

```
    global username
    username = login_username_ent.get().strip()
    password = login_password_ent.get().strip()

    if not username or not password:
        messagebox.showwarning('Fill the fields', 'Please enter both username and password.')
        return

    user_row = user_pass_data[user_pass_data['username'] == username]
    if not user_row.empty and user_row.iloc[0]['password'] == password:
        messagebox.showinfo('Success', 'Login successful!')
        show_frame(Declar)
    else:
        messagebox.showwarning('login failed','please enter correct username and password')


def increase_qno(): #increasing qustion number
    global qno
    qno+=1
```

```
def Show_Question(id): #Showing question for the first instance
    global qno
    global globalid
    global section_question

    globalid = id  # Update the global ID for the subject


    # Filter questions for the selected subject
    section_question = questions_data[questions_data['Subject'] ==
id].sample(10).reset_index(drop=True)


    # Check if `qno` is within valid range
    question_text = f"{qno}. {section_question.loc[qno - 1, 'Question']}"
    Question_label.configure(text=question_text)


    # Update options
    opt1.configure(text=section_question.loc[qno - 1, "OptionA"])
    opt2.configure(text=section_question.loc[qno - 1, "OptionB"])
    opt3.configure(text=section_question.loc[qno - 1, "OptionC"])
    opt4.configure(text=section_question.loc[qno - 1, "OptionD"])
```

```
def show_Questions_forcont(): #Showing question after first instance
    global qno
    global section_question

    if qno<=len(section_question):
        question_text = f"{qno}. {section_question.loc[qno - 1, 'Question']}"
        Question_label.configure(text=question_text)


            # Update options
        opt1.configure(text=section_question.loc[qno - 1, "OptionA"])
        opt2.configure(text=section_question.loc[qno - 1, "OptionB"])
        opt3.configure(text=section_question.loc[qno - 1, "OptionC"])
        opt4.configure(text=section_question.loc[qno - 1, "OptionD"])

        opt1.configure(bg='#2eff70')
        opt2.configure(bg='#2eff70')
        opt3.configure(bg='#2eff70')
        opt4.configure(bg='#2eff70')
    else:
        Progress_recorded()
        show_stats()


def check(opt):
    global res
    global section_question
    global score
    section_ans=section_question
    if opt==section_ans.loc[qno-1,'Correct_Option']:
        res=1
    else:
        res=0


def color_button(p):
    if p=='Option A':
        opt1.configure(bg='red')
        opt2.configure(bg='#2eff70')
        opt3.configure(bg='#2eff70')
        opt4.configure(bg='#2eff70')
    elif p=='Option B':
        opt1.configure(bg='#2eff70')
        opt2.configure(bg='red')
        opt3.configure(bg='#2eff70')
        opt4.configure(bg='#2eff70')
    elif p=='Option C':
        opt1.configure(bg='#2eff70')
        opt2.configure(bg='#2eff70')
        opt3.configure(bg='red')
        opt4.configure(bg='#2eff70')
    elif p=='Option D':
        opt1.configure(bg='#2eff70')
        opt2.configure(bg='#2eff70')
        opt3.configure(bg='#2eff70')
        opt4.configure(bg='red')

def score_add():
    global score
    score+=int(res)
    score_label.config(text=f"Score: {score}")

def Progress_recorded():
    global username, score, globalid, user_progress_data, quiz_subjects
    new_row = pd.DataFrame([[username, score, globalid]],
columns=["Username", "Score", "Subject"])
    user_progress_data = pd.concat([user_progress_data, new_row],
ignore_index=True)
    user_progress_data.to_csv('Data/user_progress.csv', index=False)
    create_piechart(score)
    create_barchart(quiz_subjects,user_progress_data,username)


def show_stats(): #Showing Statistics frame
    global pie
    Stats_label.config(text=f"Congrats {username} for completing this
Quiz!!!")
    Final_score_label.configure(text=f"Score: {score}")
    pie=Image.open('Images/piechart.png')
    pie = pie.resize((400, 400))
    pie = ImageTk.PhotoImage(pie)
    piechart_label.config(image=pie,bg='#E9EDF1')
    show_frame(Stats)


def bargraph_show():
    global bargraph
    bargraph=Image.open('Images/Barchart.png')
    bargraph = bargraph.resize((400, 400))

    bargraph = ImageTk.PhotoImage(bargraph)

    Barchart_Image.config(image=bargraph)


def show_graph(pid):

    global username,user_progress_data,Linegraph

    create_linechart(pid,user_progress_data,username)

    Linegraph=Image.open('Images/LineChart.png')

    Linegraph = Linegraph.resize((400, 400))

    Linegraph = ImageTk.PhotoImage(Linegraph)

    Linegraph_Image.config(image=Linegraph)


def exit():

    root.destroy()


def restart():

    global qno, score, section_question, res, username,
globalid,optname,user_response


    # Reset all necessary global variables

    qno = 1
```

```
score = 0

section_question = None

res = None

globalid = None

optname=None

user_response=pd.DataFrame(columns=['Response'])


# Reset the score label and question display

score_label.config(text=f"Score: {score}")

Question_label.config(text="")


# Reset the options buttons

opt1.config(bg="#2eff70", text="")

opt2.config(bg="#2eff70", text="")

opt3.config(bg="#2eff70", text="")

opt4.config(bg="#2eff70", text="")


# Reset the submit button

submitbtn.config(state=NORMAL)


show_frame(Declar)
```

```
def getting_option_name(df,no,str):

    txt=df.loc[no,str]

    txt=txt.replace(' ','')

    option_name=df.loc[no,txt]

    return option_name


def option_name(label):

    global optname

    optname=label


def user_response_name(df,no,str):

    txt=df.loc[no-1,str]

    return txt


def adding_user_response():

    global section_question,user_response,optname,qno

    user_response.loc[qno-
1]=[user_response_name(section_question,qno,optname)]


def questionplate():
    global section_question,user_response

correct_answer_1.configure(text=getting_option_name(section_question,0,'
Correct_Option'))

correct_answer_2.configure(text=getting_option_name(section_question,1,'
Correct_Option'))

correct_answer_3.configure(text=getting_option_name(section_question,2,'
Correct_Option'))

correct_answer_4.configure(text=getting_option_name(section_question,3,'
Correct_Option'))

correct_answer_5.configure(text=getting_option_name(section_question,4,'
Correct_Option'))

correct_answer_6.configure(text=getting_option_name(section_question,5,'
Correct_Option'))

correct_answer_7.configure(text=getting_option_name(section_question,6,'
Correct_Option'))

correct_answer_8.configure(text=getting_option_name(section_question,7,'
Correct_Option'))
```

```
correct_answer_9.configure(text=getting_option_name(section_question,8,'
Correct_Option'))

correct_answer_10.configure(text=getting_option_name(section_question,9,'
Correct_Option'))

  user_answer_1.configure(text=user_response.loc[0,'Response'])
  user_answer_2.configure(text=user_response.loc[1,'Response'])
  user_answer_3.configure(text=user_response.loc[2,'Response'])
  user_answer_4.configure(text=user_response.loc[3,'Response'])
  user_answer_5.configure(text=user_response.loc[4,'Response'])
  user_answer_6.configure(text=user_response.loc[5,'Response'])
  user_answer_7.configure(text=user_response.loc[6,'Response'])
  user_answer_8.configure(text=user_response.loc[7,'Response'])
  user_answer_9.configure(text=user_response.loc[8,'Response'])
  user_answer_10.configure(text=user_response.loc[9,'Response'])

def color_wr():
  if user_answer_1.cget('text')==correct_answer_1.cget('text'):
    user_answer_1.configure(bg='#54f780')
  else:
    user_answer_1.configure(bg='#fa6446')

if user_answer_2.cget('text')==correct_answer_2.cget('text'):
    user_answer_2.configure(bg='#54f780')
else:
    user_answer_2.configure(bg='#fa6446')

if user_answer_3.cget('text')==correct_answer_3.cget('text'):
    user_answer_3.configure(bg='#54f780')
else:
    user_answer_3.configure(bg='#fa6446')

if user_answer_4.cget('text')==correct_answer_4.cget('text'):
    user_answer_4.configure(bg='#54f780')
else:
    user_answer_4.configure(bg='#fa6446')

if user_answer_5.cget('text')==correct_answer_5.cget('text'):
    user_answer_5.configure(bg='#54f780')
else:
    user_answer_5.configure(bg='#fa6446')
```

```
if user_answer_6.cget('text')==correct_answer_6.cget('text'):
    user_answer_6.configure(bg='#54f780')
else:
    user_answer_6.configure(bg='#fa6446')

if user_answer_7.cget('text')==correct_answer_7.cget('text'):
    user_answer_7.configure(bg='#54f780')
else:
    user_answer_7.configure(bg='#fa6446')

if user_answer_8.cget('text')==correct_answer_8.cget('text'):
    user_answer_8.configure(bg='#54f780')
else:
    user_answer_8.configure(bg='#fa6446')

if user_answer_9.cget('text')==correct_answer_9.cget('text'):
    user_answer_9.configure(bg='#54f780')
else:
    user_answer_9.configure(bg='#fa6446')

if user_answer_10.cget('text')==correct_answer_10.cget('text'):
    user_answer_10.configure(bg='#54f780')
    else:

        user_answer_10.configure(bg='#fa6446')


def boo():

    global ch

    ch=1


def check_none(choice_flag):

    if choice_flag == 0:  # No option selected

        messagebox.showwarning("No Option Selected", "Please choose an 
option before submitting.")

        return False  # Stop execution

    return True  # Proceed


def restart_characterflag():

    global ch

    ch=0



user_pass_data=pd.read_csv('Data/users.csv')

questions_data=pd.read_csv('Data/krishna.csv')

user_progress_data=pd.read_csv('Data/user_progress.csv')
```

```
# List of subjects for the quiz

quiz_subjects = [

    "General Knowledge",

    "Science",

    "Mathematics",

    "History",

    "Geography",

    "Literature",

    "Technology",

    "Sports",

    "Entertainment",

    "Mythology",

    "Current Affairs",

    "Pop Culture"

]




qno=1

globalid=NONE

score=0
```

```
section_question=NONE

res=NONE

user_response=pd.DataFrame(columns=['Response'])

optname=None

ch=0



pie=None

bar=None

line=None



fon="vendana"

root = Tk()

root.geometry("900x600")

root.configure(background="#E9EDF1")

root.resizable(0, 0)

root.title('QUIZ')




# Frames

Welcome = Frame(root, background="#E9EDF1")

Credit_page=Frame(root,background='#E9EDF1')
```

```
Login = Frame(root, background="#E9EDF1")

Signup = Frame(root, background="#E9EDF1")

Declar = Frame(root, background="#E9EDF1")

Question = Frame(root, background="#E9EDF1")

Stats=Frame(root,background='#ffffff')

Scorechart_frame=Frame(root,background='#E9EDF1')

Barchart=Frame(root,background='#ffffff')

SProgress=Frame(root,background="#E9EDF1")

LinegraphFrame=Frame(root,background='#ffffff')


for frame in (Welcome, Credit_page,Signup,
Login,Declar,Question,Stats,Scorechart_frame,Barchart,SProgress,Linegra
phFrame):

    frame.grid(row=0, column=0, sticky="nsew")


def show_frame(frame):

    frame.tkraise()


# Show the Welcome page initially

show_frame(Welcome)
```

```
# Welcome Page
welcome_label = Label(
    Welcome, text="Welcome to Quiz", font=(fon, 36, "bold"),
bg="#E9EDF1"
)
welcome_label.pack(pady=95,padx=250)  # Centered horizontally


play_btn = Button(
    Welcome,
    text="Play",
    font=(fon, 20),
    width=15,
    height=2,
    bg="#D6DBDF",
    command=lambda: show_frame(Signup)
)
play_btn.pack(pady=(100,0))


credit_btn=Button(Welcome,
    text="Credits",
    font=(fon, 17),
    width=15,
    height=2,
    bg="#D6DBDF",
    command=lambda: show_frame(Credit_page))
credit_btn.pack(pady=(56,0))


#Credit Page
GUI_cred=Label(Credit_page,text="GUI: Omkaar",font=(fon,18))
GUI_cred.pack(pady=(150,10))
Backend_cred=Label(Credit_page,text="Backend: Omkaar & Krishna
bansal",font=(fon,18))
Backend_cred.pack(pady=(10,10))
Datacollection_cred=Label(Credit_page,text="Data Collection: Krishna
Bansal",font=(fon,18))
Datacollection_cred.pack(pady=(10,10))
homebtn=Button(Credit_page,text='Back',font=(fon,14),command=lambda
:show_frame(Welcome))
homebtn.pack(pady=(5,8))
```

```
# Sign Up Page
signup_label = Label(
    Signup, text="Sign Up Page", font=(fon, 36, "bold"), bg="#E9EDF1"
)
signup_label.pack(pady=9,padx=250)  # Centered horizontally


signup_username_txt=Label(
    Signup,
    text="username",
    font=(fon,28),
    bg="#E9EDF1"
)
signup_username_txt.pack(pady=(79,0),padx=(250,0),anchor="w")


signup_username_ent=Entry(
    Signup,
    width=20,
    font=(fon,22)
)
signup_username_ent.pack(pady=(13,0),padx=0)
```

```
signup_password_txt=Label(
   Signup,
   text="password",
   font=(fon,28),
   bg="#E9EDF1"
)
signup_password_txt.pack(pady=(25,0),padx=(250,0),anchor="w")


signup_password_ent=Entry(
   Signup,
   width=20,
   font=(fon,22),
   show="*"
)
signup_password_ent.pack(pady=(13,10),padx=0)


subm_btn=Button(
   Signup,
   text="Submit",
   bg="#5582BE",
   width=20,
    font=(fon,20),
    command=lambda :add_user()
)
subm_btn.pack(pady=(20,90))



login_frame = Frame(Signup, bg="#E9EDF1")
login_frame.pack(pady=(10, 0))

login_txt=Label(
    login_frame,
    text="already have credentials",
    bg="#E9EDF1",
    fg="#5582BE",
    font=(fon,12)
)
login_txt.pack(side="left", padx=(0, 5))

login_btn=Button(
    login_frame,
    text="login",
    command=lambda: show_frame(Login)
)
login_btn.pack(side="left")




#Login
login_label = Label(
    Login, text="login Page", font=(fon, 36, "bold"), bg="#E9EDF1"
)
login_label.pack(pady=9,padx=250)  # Centered horizontally

login_username_txt=Label(
    Login,
    text="username",
    font=(fon,28),
    bg="#E9EDF1"
)
login_username_txt.pack(pady=(79,0),padx=(250,0),anchor="w")
```

```
login_username_ent=Entry(
   Login,
   width=20,
   font=(fon,22)
)
login_username_ent.pack(pady=(13,0),padx=0)


login_password_txt=Label(
   Login,
   text="password",
   font=(fon,28),
   bg="#E9EDF1",
)
login_password_txt.pack(pady=(25,0),padx=(250,0),anchor="w")


login_password_ent=Entry(
   Login,
   width=20,
   font=(fon,22),
   show='*'
)
```

```
login_password_ent.pack(pady=(13,10),padx=0)


sub_btn=Button(
    Login,
    text="Submit",
    bg="#5582BE",
    width=20,
    font=(fon,20),
    command=lambda :login_user()
)
sub_btn.pack(pady=(20,90))


signup_frame = Frame(Login, bg="#E9EDF1")
signup_frame.pack(pady=(10, 0))


signup_txt=Label(
    signup_frame,
    text="Don't have credentials",
    bg="#E9EDF1",
    fg="#5582BE",
    font=(fon,12)
)
signup_txt.pack(side="left", padx=(0, 5))


signup_btn=Button(
    signup_frame,
    text="signup",
    command=lambda: show_frame(Signup)
)


signup_btn.pack(side="left")




#Declare


# Declare Frame
declar_label = Label(Declar, text="Choose the subject", font=(fon, 45),
bg="#E9EDF1")
declar_label.pack()


btnframe1 = Frame(Declar, bg="#E9EDF1")
```

```
btnframe1.pack(pady=(70, 0))


# Buttons with symmetrical distance using grid
btn1 = Button(btnframe1, text=str(quiz_subjects[0]), width=15, font=(fon, 20),bg='#C0EF76',command=lambda : (show_frame(Question),Show_Question('General Knowledge')))
btn1.grid(row=0, column=0, padx=20, pady=30)


btn2 = Button(btnframe1, text=str(quiz_subjects[1]), width=15, font=(fon, 20),bg='#C0EF76',command=lambda : (show_frame(Question),Show_Question('Science')))
btn2.grid(row=0, column=1, padx=20, pady=30)


btn3 = Button(btnframe1, text=str(quiz_subjects[2]), width=15, font=(fon, 20),bg='#C0EF76',command=lambda : (show_frame(Question),Show_Question('Mathematics')))
btn3.grid(row=0, column=2, padx=20, pady=30)


btn4 = Button(btnframe1, text=str(quiz_subjects[3]), width=15, font=(fon, 20),bg='#C0EF76',command=lambda : (show_frame(Question),Show_Question('History')))
btn4.grid(row=1, column=0, padx=20, pady=30)
```

```
btn5 = Button(btnframe1, text=str(quiz_subjects[4]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Geography')))
btn5.grid(row=1, column=1, padx=20, pady=30)


btn6 = Button(btnframe1, text=str(quiz_subjects[5]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Literature')))
btn6.grid(row=1, column=2, padx=20, pady=30)


btn7 = Button(btnframe1, text=str(quiz_subjects[6]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Technology')))
btn7.grid(row=2, column=0, padx=20, pady=30)


btn8 = Button(btnframe1, text=str(quiz_subjects[7]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Sports')))
btn8.grid(row=2, column=1, padx=20, pady=30)


btn9 = Button(btnframe1, text=str(quiz_subjects[8]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Entertainment')))
```

```
btn9.grid(row=2, column=2, padx=20, pady=30)


btn10 = Button(btnframe1, text=str(quiz_subjects[9]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Mythology')))
btn10.grid(row=3, column=0, padx=20, pady=30)


btn11 = Button(btnframe1, text=str(quiz_subjects[10]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Current Affairs')))
btn11.grid(row=3, column=1, padx=20, pady=30)


btn12 = Button(btnframe1, text=str(quiz_subjects[11]), width=15, font=(fon,
20),bg='#C0EF76',command=lambda :
(show_frame(Question),Show_Question('Pop Culture')))
btn12.grid(row=3, column=2, padx=20, pady=30)




#Question
```

```
Question_label=Label(Question,text=str(qno)
+"",bg='#E9EDF1',font=(fon,22),wraplength=900,justify="left")
Question_label.pack(anchor='w',padx=(4,6),pady=(10,5))


score_label=Label(Question,text=("Score:
"+str(score)),bg="#E9EDF1",font=(fon,18))
score_label.pack(anchor='e')


optionframe=Frame(Question,bg="#E9EDF1")
optionframe.pack(padx=(120,0),anchor='w',pady=(120,0))


opt1=Button(optionframe,text="",anchor='w',font=(fon,18),bg="#2eff70",w
idth=17,command=lambda :(check('Option A'),color_button('Option
A'),option_name('OptionA'),boo()))
opt1.grid(row=0,column=0)


opt2=Button(optionframe,text="",anchor='w',font=(fon,18),bg="#2eff70",w
idth=17,command=lambda :(check('Option B'),color_button('Option
B'),option_name('OptionB'),boo()))
opt2.grid(row=0,column=2,padx=(120,0))
```

```
opt3=Button(optionframe,text="",anchor='w',font=(fon,18),bg="#2eff70",w
idth=17,command=lambda :(check('Option C'),color_button('Option
C'),option_name('OptionC'),boo()))

opt3.grid(row=1,column=0,pady=(45,0))



opt4=Button(optionframe,text="",anchor='w',font=(fon,18),bg="#2eff70",w
idth=17,command=lambda :(check('Option D'),color_button('Option
D'),option_name('OptionD'),boo()))

opt4.grid(row=1,column=2,padx=(120,0),pady=(45,0))



submitbtn=Button(Question,text='Submit',font=(fon,20),width=17,bg="#cef
522",

                command=lambda:(None if not check_none(ch) else
(adding_user_response(), score_add(), increase_qno(),
show_Questions_forcont(),restart_characterflag())))

submitbtn.pack(anchor="s",pady=(50))




#stats

Stats_label=Label(Stats,text="",font=(fon,20),bg="#ffffff")

Stats_label.pack()
```

```
Final_score_label=Label(Stats,text='score',font=(fon,24),bg="#ffffff")

Final_score_label.pack(anchor='w',padx=(45,7),pady=(23,0))


graph_frame=Frame(Stats,bg='#ffffff')

graph_frame.pack()


piechart_label=Label(graph_frame,image=pie)

piechart_label.grid(row=0,column=0,padx=(3,7))




graphbtn_frame=Frame(graph_frame,bg="#ffffff")

graphbtn_frame.grid(row=0,column=1)


ScoreBoard_btn=Button(graphbtn_frame,text='View your
Answers',font=(fon,14),command=lambda:
(show_frame(Scorechart_frame),questionplate(),color_wr()))

ScoreBoard_btn.grid(row=0,column=0,padx=(7,9),pady=(0,10))


barbtn=Button(graphbtn_frame,text='View your highest in each
subject',font=(fon,14),command=lambda :
(bargraph_show(),show_frame(Barchart)))

barbtn.grid(row=1,column=0,padx=(7,9),pady=(0,10))
```

```
linebtn=Button(graphbtn_frame,text='View your progress in each subject',font=(fon,14),command=lambda :(show_frame(SProgress)))
linebtn.grid(row=2,column=0,padx=(7,9),pady=(5,8))


restartbtn=Button(graphbtn_frame,text='Back',font=(fon,14),command=lambda :restart())
restartbtn.grid(row=3,column=0,padx=(7,9),pady=(5,8))


exitbtn=Button(graphbtn_frame,text='exit',font=(fon,14),command=lambda : exit())
exitbtn.grid(row=4,column=0,padx=(7,9),pady=(5,8))


#Scorechart
scorechart = Frame(Scorechart_frame, width=60)
scorechart.pack(anchor='center', pady=(134, 0))


# Question Number Label
Question_number_label = Label(scorechart, text="Question number",width=14,font=(fon,15))
Question_number_label.grid(row=0, column=0)
```

```
# Question Numbers (1 to 10)

for i in range(1, 11):

    question_number = Label(scorechart, text=i, width=14, font=(fon,
15),bg='#E9EDF1')

    question_number.grid(row=i, column=0)


# User Answer Label

user_answer_label = Label(scorechart, text="Your
Answer",width=18,font=(fon,15),bg='#E9EDF1')

user_answer_label.grid(row=0, column=1)


user_answer_1 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_1.grid(row=1, column=1)

user_answer_2= Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_2.grid(row=2, column=1)

user_answer_3 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_3.grid(row=3, column=1)

user_answer_4 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))
```

```
user_answer_4.grid(row=4, column=1)

user_answer_5 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_5.grid(row=5, column=1)

user_answer_6 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_6.grid(row=6, column=1)

user_answer_7 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_7.grid(row=7, column=1)

user_answer_8 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_8.grid(row=8, column=1)

user_answer_9 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_9.grid(row=9, column=1)

user_answer_10 = Label(scorechart, text='abdracadraabr', width=18,
font=(fon, 15))

user_answer_10.grid(row=10, column=1)
```

```
Correct_answer_label = Label(scorechart, text="Correct
Answer",width=18,font=(fon,15),bg='#E9EDF1')

Correct_answer_label.grid(row=0, column=2)



correct_answer_1 = Label(scorechart, text='abdracadraabr',
anchor='w',width=18, font=(fon, 15),bg='#54f780')

correct_answer_1.grid(row=1, column=2)

correct_answer_2= Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_2.grid(row=2, column=2)

correct_answer_3 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_3.grid(row=3, column=2)

correct_answer_4 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_4.grid(row=4, column=2)

correct_answer_5 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_5.grid(row=5, column=2)

correct_answer_6 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_6.grid(row=6, column=2)
```

```
correct_answer_7 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_7.grid(row=7, column=2)

correct_answer_8 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_8.grid(row=8, column=2)

correct_answer_9 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_9.grid(row=9, column=2)

correct_answer_10 = Label(scorechart, text='abdracadraabr',anchor='w',
width=18, font=(fon, 15),bg='#54f780')

correct_answer_10.grid(row=10, column=2)


Cbackbtn=Button(scorechart,bg='blue',text="Back",command=lambda :sh
ow_frame(Stats))

Cbackbtn.grid(row=11,column=1,pady=(5,8))




#Barchart

bargraph=None

Barchart_Image=Label(Barchart,image=bargraph)
```

```
Barchart_Image.pack()


backbtn=Button(Barchart,bg='blue',text="Back",command=lambda :show
_frame(Stats))

backbtn.pack(anchor='s')


#SProgress

Pbtnframe = Frame(SProgress, bg="#E9EDF1")

Pbtnframe.pack(pady=(70, 0))


Pbtn1 = Button(Pbtnframe, text=str(quiz_subjects[0]), width=15, font=(fon,
20),bg='#C0EF76'

            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[0])))

Pbtn1.grid(row=0, column=0, padx=20, pady=30)


Pbtn2 = Button(Pbtnframe, text=str(quiz_subjects[1]), width=15, font=(fon,
20),bg='#C0EF76'

            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[1])))

Pbtn2.grid(row=0, column=1, padx=20, pady=30)
```

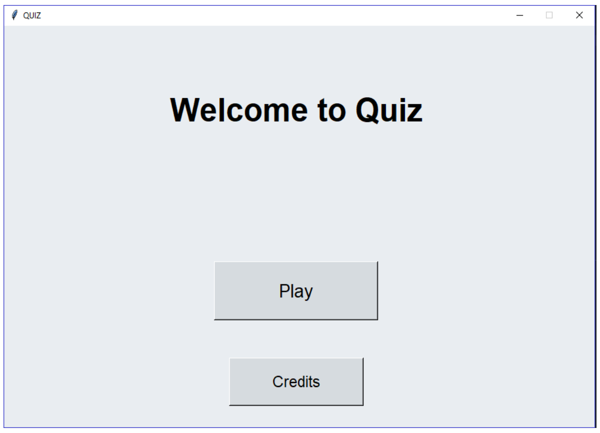
```
Pbtn3 = Button(Pbtnframe, text=str(quiz_subjects[2]), width=15, font=(fon,
20),bg='#C0EF76'
            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[2])))
Pbtn3.grid(row=0, column=2, padx=20, pady=30)


Pbtn4 = Button(Pbtnframe, text=str(quiz_subjects[3]), width=15, font=(fon,
20),bg='#C0EF76'
            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[3])))
Pbtn4.grid(row=1, column=0, padx=20, pady=30)


Pbtn5 = Button(Pbtnframe, text=str(quiz_subjects[4]), width=15, font=(fon,
20),bg='#C0EF76'
            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[4])))
Pbtn5.grid(row=1, column=1, padx=20, pady=30)


Pbtn6 = Button(Pbtnframe, text=str(quiz_subjects[5]), width=15, font=(fon,
20),bg='#C0EF76'
            ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[5])))
Pbtn6.grid(row=1, column=2, padx=20, pady=30)
```

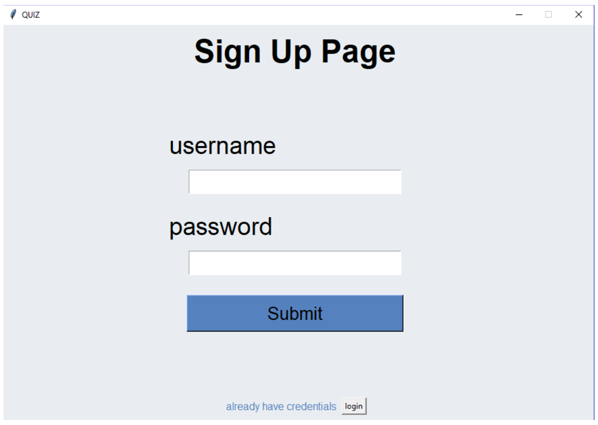
```
Pbtn7 = Button(Pbtnframe, text=str(quiz_subjects[6]), width=15, font=(fon, 20),bg='#C0EF76'
            ,command=lambda : (show_frame(LinegraphFrame),show_graph(quiz_subjects[6])))
Pbtn7.grid(row=2, column=0, padx=20, pady=30)


Pbtn8 = Button(Pbtnframe, text=str(quiz_subjects[7]), width=15, font=(fon, 20),bg='#C0EF76'
            ,command=lambda : (show_frame(LinegraphFrame),show_graph(quiz_subjects[7])))
Pbtn8.grid(row=2, column=1, padx=20, pady=30)


Pbtn9 = Button(Pbtnframe, text=str(quiz_subjects[8]), width=15, font=(fon, 20),bg='#C0EF76'
            ,command=lambda : (show_frame(LinegraphFrame),show_graph(quiz_subjects[8])))
Pbtn9.grid(row=2, column=2, padx=20, pady=30)


Pbtn10 = Button(Pbtnframe, text=str(quiz_subjects[9]), width=15, font=(fon, 20),bg='#C0EF76'
             ,command=lambda : (show_frame(LinegraphFrame),show_graph(quiz_subjects[9])))
```

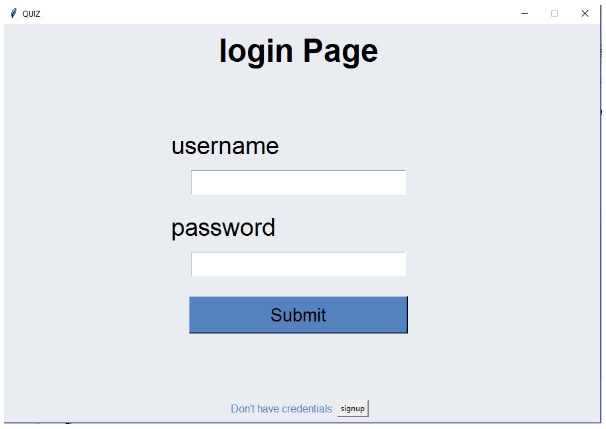
```
Pbtn10.grid(row=3, column=0, padx=20, pady=30)


Pbtn11 = Button(Pbtnframe, text=str(quiz_subjects[10]), width=15,
font=(fon, 20),bg='#C0EF76'
              ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[10])))
Pbtn11.grid(row=3, column=1, padx=20, pady=30)


Pbtn12 = Button(Pbtnframe, text=str(quiz_subjects[11]), width=15,
font=(fon, 20),bg='#C0EF76'
              ,command=lambda :
(show_frame(LinegraphFrame),show_graph(quiz_subjects[11])))
Pbtn12.grid(row=3, column=2, padx=20, pady=30)


Pbackbtn=Button(SProgress,bg='blue',text="Back"
              ,command=lambda :show_frame(Stats))
Pbackbtn.pack()




#LinegraphFrame
Linegraph=None
```

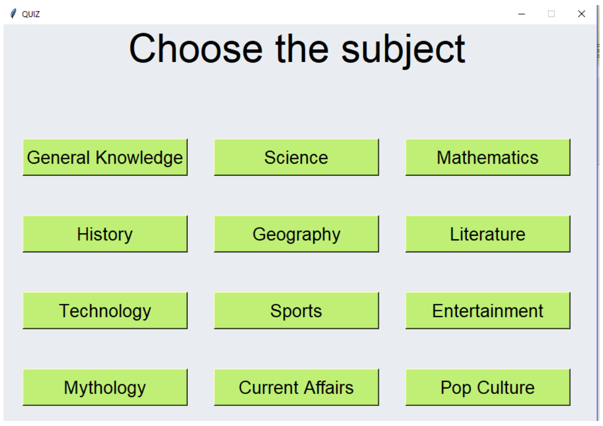
```
Linegraph_Image=Label(LinegraphFrame,image=Linegraph)

Linegraph_Image.grid(row=0,column=0)



Lbackbtn=Button(LinegraphFrame,bg='blue',text="Back",command=lamb
da :show_frame(SProgress))

Lbackbtn.grid(row=1,column=0)




root.mainloop()
```

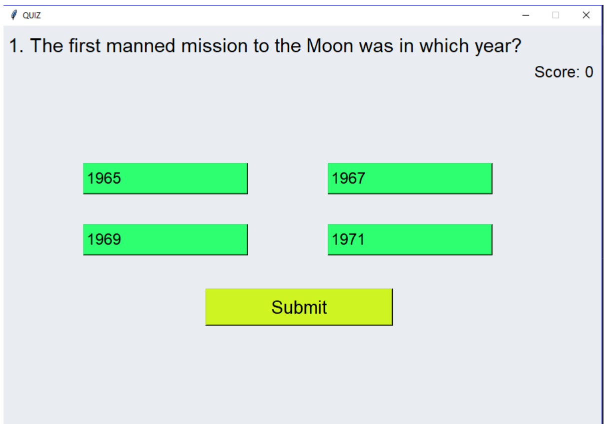
OUTPUT



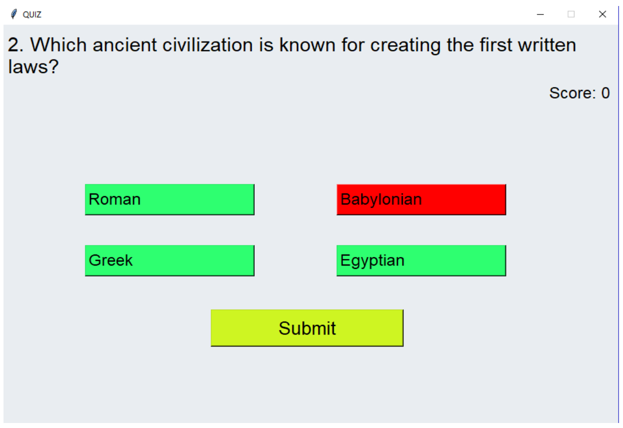




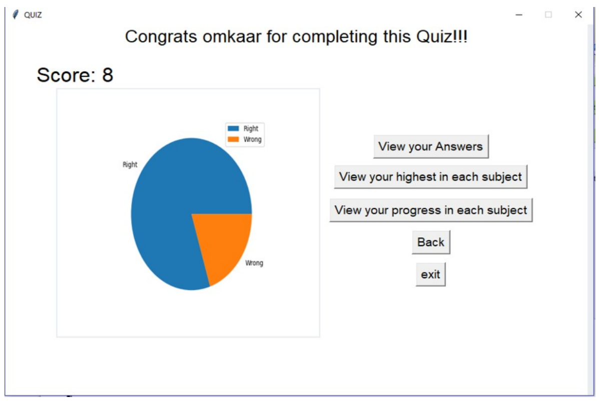



1. The first manned mission to the Moon was in which year?

Score: 0

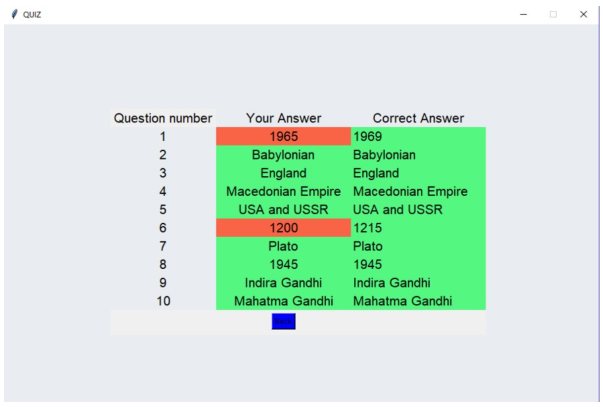

2. Which ancient civilization is known for creating the first written laws?

Score: 0

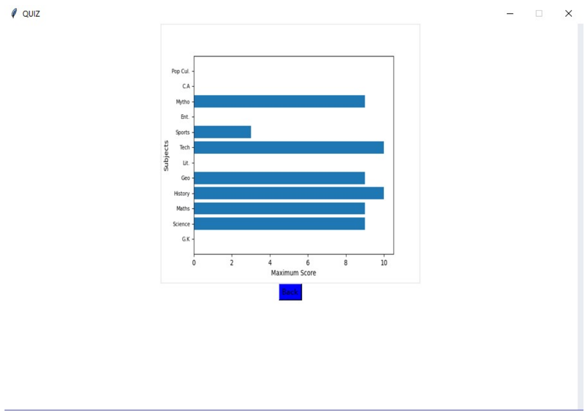

QUIZ
Right
Wrong
Right
Wrong
View your Answers
View your highest in each subject
View your progress in each subject
Back
exit

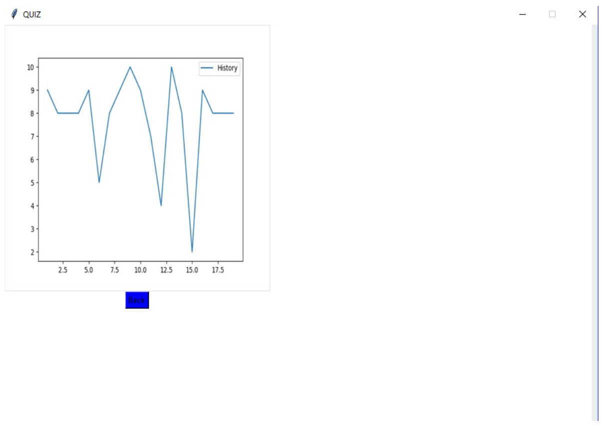
Congrats omkaar for completing this Quiz!!!

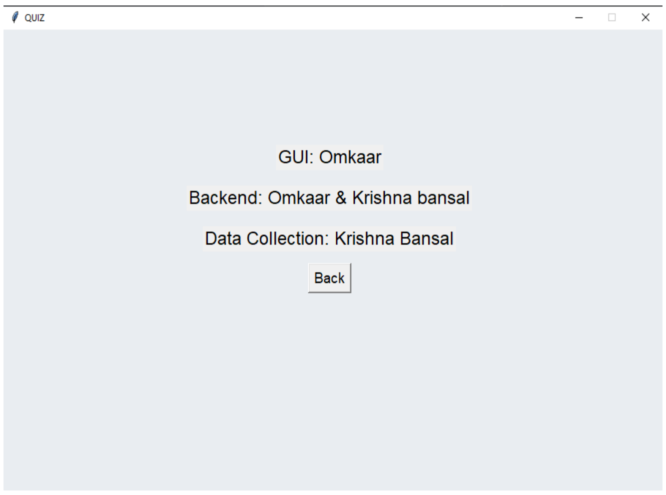
Score: 8



Question number	Your Answer	Correct Answer
1	1965	1969
2	Babylonian	Babylonian
3	England	England
4	Macedonian Empire	Macedonian Empire
5	USA and USSR	USA and USSR
6	1200	1215
7	Plato	Plato
8	1945	1945
9	Indira Gandhi	Indira Gandhi
10	Mahatma Gandhi	Mahatma Gandhi







GUI: Omkaar

Backend: Omkaar & Krishna bansal

Data Collection: Krishna Bansal

BIBLIOGRAPHY

Books

- Informatics Practices With Python - Class XI By : SumitaArora
- Informatics Practices With Python - Class XII By : SumitaArora
- Informatics Practices With Python - Class XII By : Preeti Arora

Websites

- https://www.dev.mysql.com
- https://www.python.org
- https://www.w3resource.com

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