

## **INTRODUCTION**

### **ABSTRACT**

Development of Quiz application is mainly required by students and learners to prepare themselves for different examinations directly through Smart-Phones and tablets in hands. The main aim of this project is to facilitate students in learning, gaining and improving their knowledge skills.

At the meantime, our application provides them fun so that the users can prepare for interviews, entrance tests or any other corresponding purposes in a fresh mood and can't get bored or frustrated due to the dullness of application. We designed the application to facilitate the users to be able to take short quizzes using portable devices such as smart phones and tablets

The MCQ quiz application has been developed to solve the problems in the practicing manual system. The online quiz application will help in managing the quiz event in a smooth way. Quiz is the method of answering the question that has been based on general knowledge and so on. The user interface must be simple and easy to understand even by the common man.

This work deals with a multiple-choice question examination system .This application is developed for educational purpose, allowing the users to prepare the multiple-choice questions for different examinations the main goal of the application is to enable users to practice for subjective tests conducted for admissions and recruitment, with focus on computer science field.

The purpose of this application is to automate the existing manual system by the help of computerized equipment, fulfilling requirements so that valuable data can be stored for a longer period of time with easy access. The required software is easily available and is easy to work with.

Another plus of online quizzes is getting immediate results from your participants. Not only does the creator get the results, the participant itself is also possible to get his or her results. This makes it for the creator easy to identify the gaps in knowledge. The participants are able to view on what kind of section they have to improve themselves.

## **WHAT IS MCQ QUIZ APPLICATION**

Users can access all of the quizzes and can attempt any of the one. There will be a limited number of questions and for each correct answer the user will get a credit score. users can see the answer as well as any query related to it.

There are many quiz applications available currently on the internet but there are few which provide better understanding between users and the application like providing proper answers, user query solving and answering it.

To develop an application which will contain solutions to above problems, by this application a user can expand his/her knowledge among the world.

The users who use this system don't need high computing knowledge and also the system will inform them while entering invalid data. This quiz website provides a great platform for practice. The proposed work in this field is available on the internet in huge amounts like many websites are available for playing quizzes online and query solving of the users; these websites provide a large variety of questions.

## **PURPOSE**

This web application provides facility to play online quizzes and to practice it. It is a good platform where a student not only judges their skill but also improves their knowledge. This application can be used in educational institutes as well as in the corporate world. Engage your audience in a unique and fun way and connect them to your learning material.

It is significant more easy to randomize your question with just one click than to do it all manually. Randomizing questions and even answers of those questions is not a lot a of work to do with online quizzes. Besides the advantage of time saving, it also helps preventing students from cheating. It's possible to show one question at the time with online quizzes. People are not able to skip a question, because you will get a reminder that you can't leave the answer blank.

## **PYTHON QUIZ APPLICATION**

Python provides a standard GUI framework Tkinter which is used to develop fast and easy GUI applications. Here we will be developing a simple multiple-choice quiz in python with GUI.

We will be creating a multiple-choice quiz in Python with Tkinter. The Quiz App In Python is a simple project for taking and giving the examination online. The project contains an admin side and the user side. The admin can add the quiz questions. The users can directly enter the quiz program. To add questions, the user must log in first.

In addition, about the features of the Online Quiz system, it just contains both the admin section and the user section. Plus, admin can add questions while the user can log in to give the exam. The design of this project is pretty simple so that the user won't find any difficulties while working on it.

It is also a simple and interactive application. It contains three modes "Easy", "Normal" and "Hard"

A Quiz Project In Python just contains the user section. The user can log in to give the exam. After giving the exam, the user can see their score and evaluate themselves. The design of this project Quiz Program In Python Using Tkinter is pretty simple so that the user won't find any difficulties while working on it

Because it is not such a verbose language, reading Python is much like reading English. This is the reason why it is so easy to learn, understand, and code. It also does not need curly braces to define blocks, and indentation is mandatory. This further aids the readability of the code.

## **DESIGNS:**

## **MODULES:**

### **RANDOM MODULE:**

Python Random module is an in-built module of Python which is used to generate random numbers. These are pseudo-random numbers meaning these are not truly random. This module can be used to perform random actions such as generating random numbers, print random values for a list or string, etc.

**TKINTER MODULE:** Tkinter is the standard GUI library for Python. Python when combined with Tkinter provides a fast and easy way to create GUI applications. Tkinter provides a powerful object-oriented interface to the Tk GUI toolkit.

**SQLITE3:** It is a self-contained, file-based SQL database. It comes bundled with Python and can be used in any of your Python applications. It provides a SQL-like interface to read, query, and write SQL databases from Python.

### **TIME MODULE:**

The Python time module provides many ways of representing time in code, such as objects, numbers, and strings. It also provides functionality other than representing time, like waiting during code execution and measuring the efficiency of your code.

### **PYO MODULE:**

PYO is a Module of for the creation of a digital signal processing script. This module of Python contains classes for processing a wide variety of audio signal types. Due to this, users are able to import signal processing chains directly in Python scripts or projects and can manipulate the audio signals in real time by using an interpreter. The tool of PYO modules in Python have primitives such as mathematical operations, basic signal processing like delays, synthesis generators, filters, and much more. But it also complexes the algorithms to develop sound granulation and many other artistic audio operations

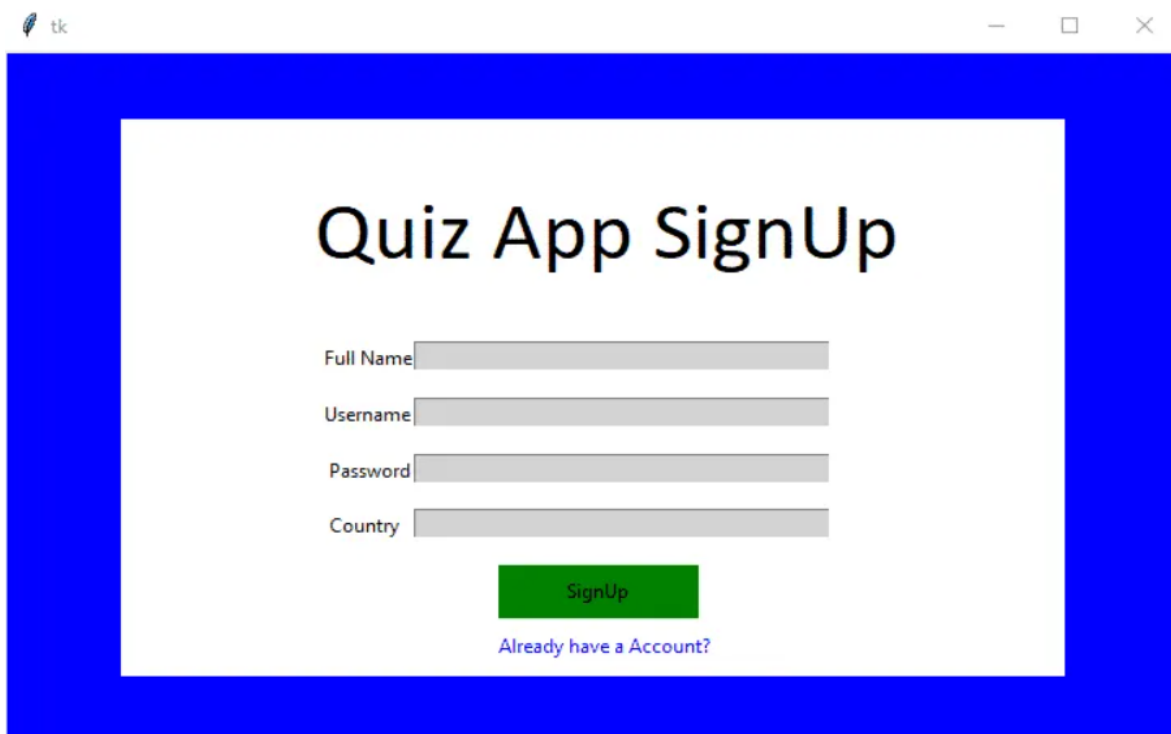
### **PIL:**

Python Imaging Library is a free and open-source additional library for the Python programming language that adds support for opening, manipulating, and saving many different image file formats. It is available for Windows, Mac OS X and Linux.

## USER INTERFACE:

**PLAY QUIZ Menu:** This is where you can take a quiz. You need to answer all the given questions in order to get a score.

**CREATE AN ACCOUNT Menu:** From here you can create an account and sign up the quiz by giving your details such as Full Name, Username ,Password and country.

A screenshot of a Tkinter window titled 'Quiz App SignUp'. The window has a blue border and a white background. It contains a title 'Quiz App SignUp' in a large black font. Below the title are four input fields labeled 'Full Name', 'Username', 'Password', and 'Country'. Each field has a light gray border. Below the input fields is a green button with the text 'SignUp' in white. At the bottom of the window, there is a link that says 'Already have a Account?' in blue text.

tk

Quiz App SignUp

Full Name

Username

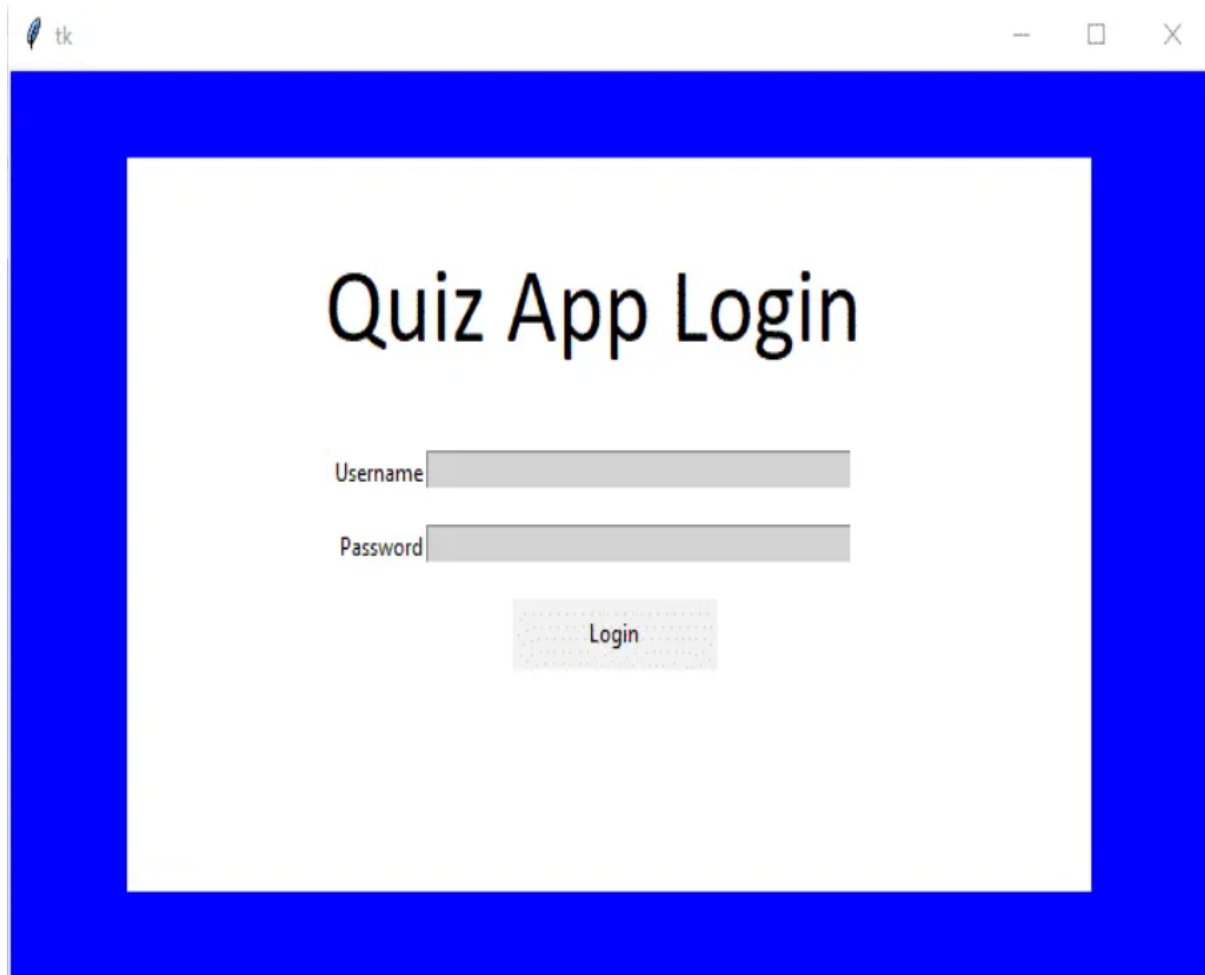
Password

Country

[SignUp](#)

[Already have a Account?](#)

**LOGIN PANEL Menu:** This is where you will log in to your account detail by giving your Username and Password and log in into the quiz



A screenshot of a Tkinter window titled 'tk' with standard window controls. The window has a thick blue border and a white central area. The text 'Quiz App Login' is centered in a large black font. Below it are two input fields: 'Username' and 'Password', each with a light gray rectangular box. A 'Login' button, represented by a light gray rectangle with dotted borders, is centered below the password field.

tk

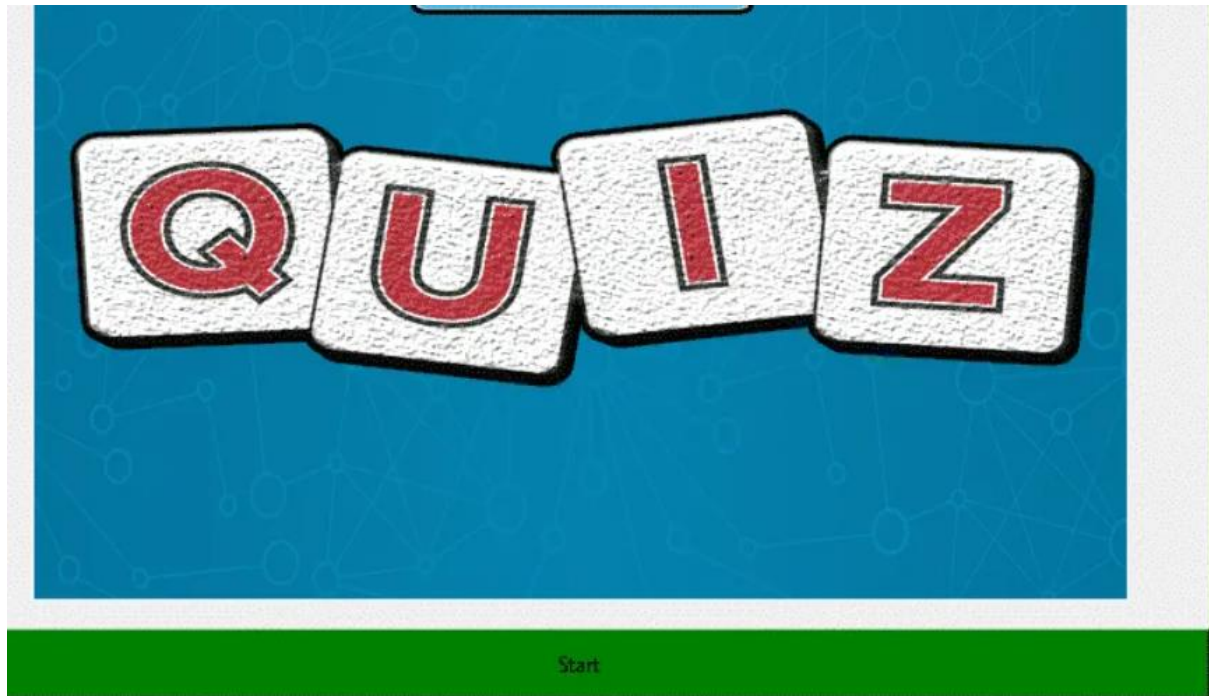
# Quiz App Login

Username

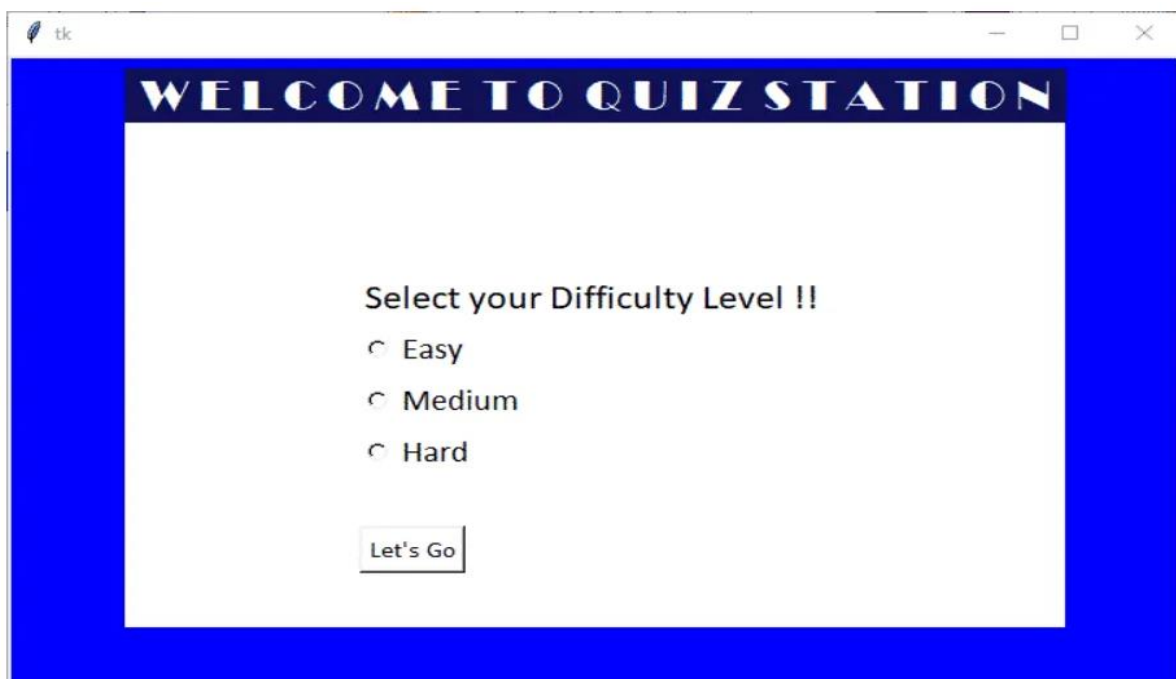
Password

Login

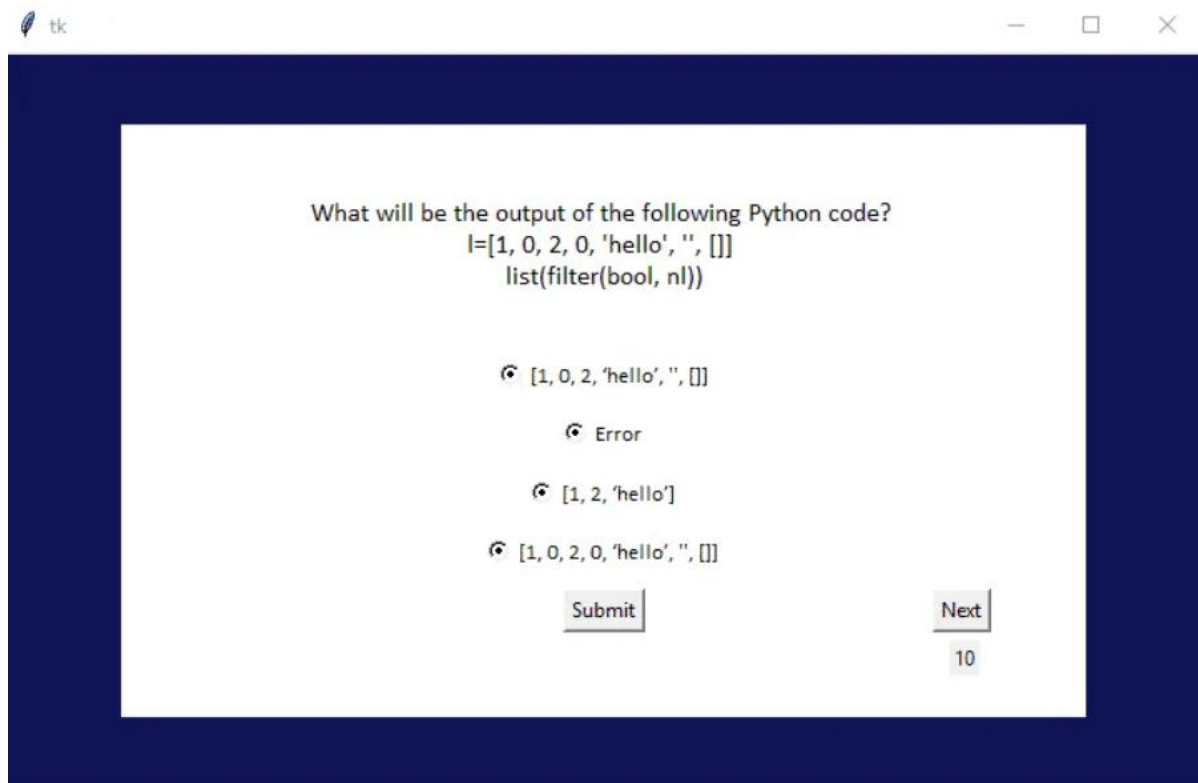
**THE START PAGE:** After log in page your quiz start page will be displayed as shown below. Press start to get into the quiz.



**THE WELCOME PAGE:** In the welcome page the user should select the level of the quiz Easy, Medium, Hard.



**THE QUESTION PAGE:** After selecting the level the user should answer the question displayed in the page and then choose the correct answer and submit the answers and the timer would be running side by side. And press Next to go to the next question.



After submitting the quiz the final scores of the user will be displayed.

**LOGOUT PANEL Menu:** This is where you will log out of your account.



## **BACKEND:**

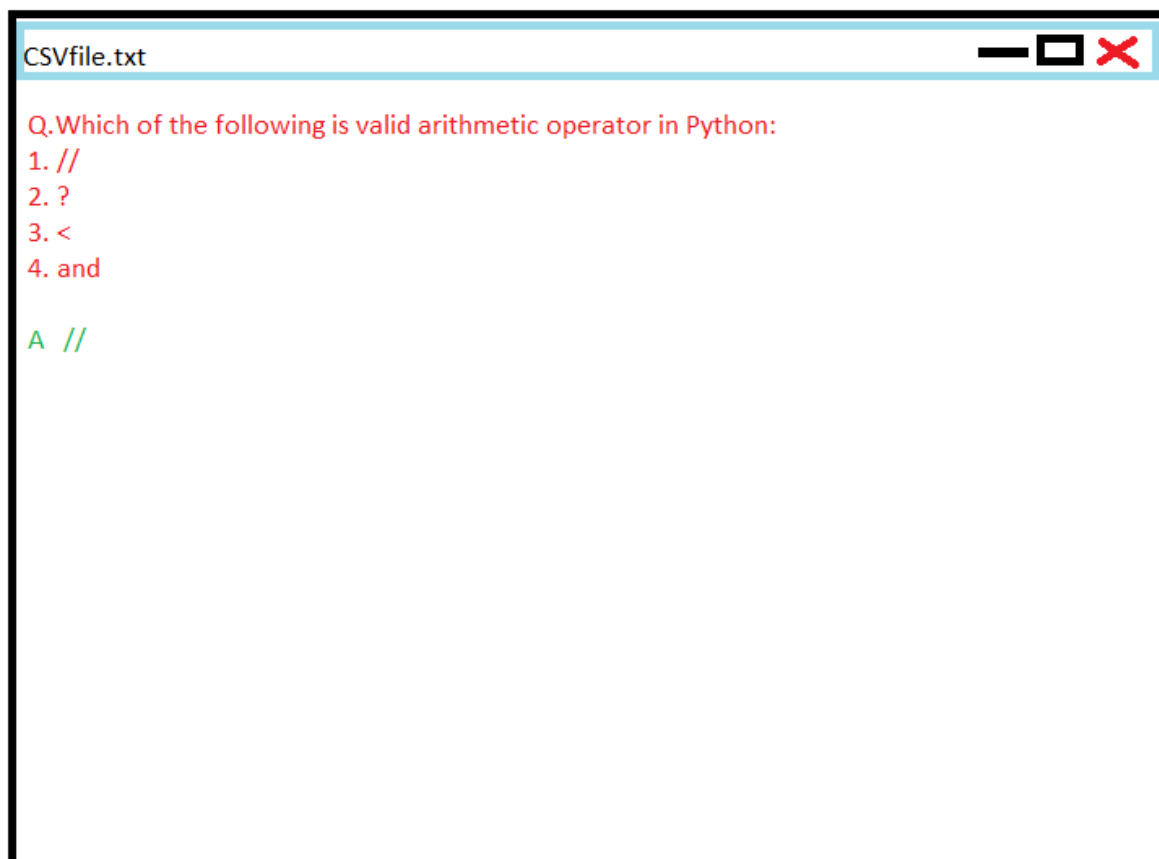
### CSV FILE

A Comma Separated Values (CSV) file is a plain text file that contains the comma-separated data.

These files are often used for exchanging data between different applications. CSV files are usually created by programs that handle huge amounts of data.

CSV Module is available in Python Standard Library. The CSV module contains classes that are used to read and write tabular form of data into CSV format. To work with CSV Files, programmer have to import CSV Module

The csv file is used to save the question and the answers of the quiz which is required to be inserted in the code.



```
CSVfile.txt
Q.Which of the following is valid arithmetic operator in Python:
1. //
2. ?
3. <
4. and

A //
```

## SQLITE3

SQLite is a self-contained, file-based SQL database. SQLite comes bundled with Python and can be used in any of your Python applications without having to install any additional software.

SQLite3 database is used to create table and to add user's sign up information such as name, username and password

## **HARDWARE AND SOFTWARE REQUIREMENTS:**

### **HARDWARE:**

Processor: Intel(R) Core(TM) i5-8250U CPU @ 1.60GHz 1.80 GHz

RAM:8.00 GB

Hard disk: 1 TB

Monitor

Keyboard

### **SOFTWARE:**

Operating system: Windows 10 (64-bit)

IDE: IDLE Python 3.6 64-bit , Pycharm community edition 2021.2

## **ALGORITHM:**

1. Use tkinter module called sign up page to add full name, user name, password and country to enter the supframe , text and color .
2. Import the tkinter module as tk for the log in page. Add the user name, password, login button with the respected color width and length .
3. Use SQLLITE3 database to create table and to add user's sign up information such as name, username and password.
4. Add a variable that counts number of correct answers. Set it to zero in the beginning
5. Use Time module to set timer for each question.
6. Import random module for generating random action s such as generating random numbers, print a random value for a list or string. Import random library to arrange the possible answers.
7. Import pil for editing images and creating background images for the user.
8. Add audio from audio file. Insert audio inside programme with the help of pyo module.
9. Create QA list and shuffle list so that questions appear in random order.
10. Take users input, check answer.

## **ADVANTAGES AND DRAWBACKS**

### **Advantages:**

- » Simple to understand and use
- » Process and result are well documented
- » Quiz results insight in users
- » Saves money as these applications are free of cost
- » Convenient as end users already know about web applications
- » Easy and efficient
- » Less time consuming

### **Drawbacks:**

- » Problems with access to internet through digital devices
- » Rigid design and inflexible procedure

## **REFERENCE**

- Google for problem solving
- [https://youtu.be/\\_PHJvjQJa3w](https://youtu.be/_PHJvjQJa3w)
- <https://youtu.be/YXPyB4XeYLA>
- <https://www.geeksforgeeks.org/python-tkinter-tutorial/>
- <https://www.geeksforgeeks.org/python-mcq-quiz-game-using-tkinter/>

