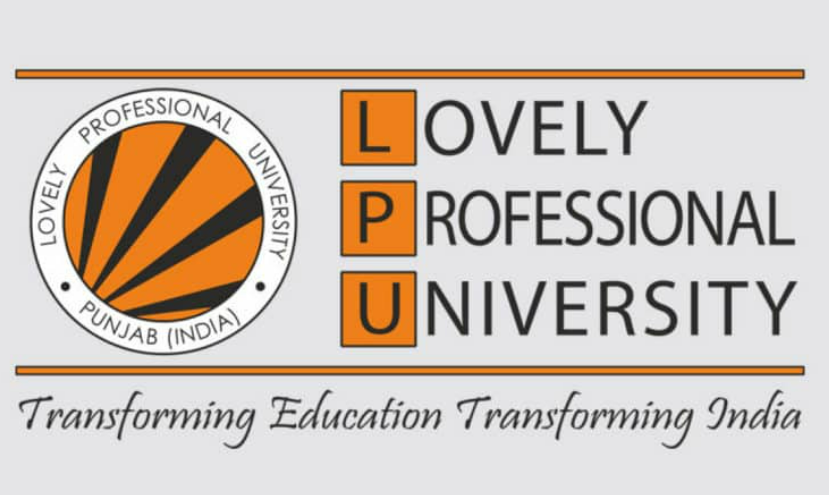
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**REPORT FOR RANDOM PASSWORD GENERATOR**

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**SECTION :- K20BG**

**SUBJECT :- INT(213)**

**PROJECT TYPE :- INDIVIDUAL**

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**RANDOM PASSWORD GENERATOR**

**ABSTRACT:**

**A** random password generator is software programme or hardware device that takes input from a random or pseudo-random number generator and automatically generates a password.

Random generated passwords can be generated manually,using simple sources of randomness such as dice or coins or they can be generated using a computer.

**ACKNOWLEDGEMENT**

This project is based on the topic RANDOM PASSWORD GENERATOR. For making this project I would like to acknowledge my mentor Dr.Sagar Pande for his constant support and valuable guidance in completing this project.

## INTRODUCTION

This project has been done as a part of assignment provided to me under the subject **Python programming** by mentor Dr. Sagar Pande.

Being interested in system security the project Random Password Generator was of great interest . This project had been able to satisfy my curiosities to a great extent .

# LIBRARIES

Tkinter:- Tkinter is a standard GUI library and is one of the easiest way to build a gui application.

Pyperclip:- it allows us to copy and paste text to and from the clipboard to your computer.

Random:- this module can generate random numbers.

String:- this module contains a number of functions to process the standard python string.

To install the library we can use pip installer from the command line:

Pip install tkinter

Pip install pyperclip

Pip install random

Pip install strings

**PROJECT FILE STRUCTURE**

Lets check the steps to build a Password generator using Python

* Import modules
* Initialized window
* Select password length
* Define functions

**STEPS TO CREATE RANDOM PASSWORD GENERATOR**

1. **Import Libraries:- the first step is to import libraries from tkinter import \* import random ,string import Pyperclip.**
2. **Initialize window:- root = Tk() root.geometry(400\*400) root.resizable(0,0)**

**Root.title(“Data flair-PASSWORD GENERATOR”)**

* **Tk() initialized tkinter which means window created**
* **Geometry() set the width and the height of the window**
* **Resizable(0,0) set the fixed size of the window**

**Title() set the title of the window**

1. **Lab**el (root, text= ‘PASSWORD GENERATOR’, font = ‘arial 15 bold’).pack()
2. Label (root,text= ‘Dataflair’,font = ‘arial 15 bold ‘).pack (side = BOTTOM)

Label() widget use to display one or more than one line of text that users can’t able to modify.

* **root** is the name which we refer to our window
* **text** which we display on the label
* **font** in which the text is written
* **pack** originated widget in block

1. **Select Password length**
2. pass\_label = Label (root, text = ‘PASSWORD LENGTH’, font = ‘arial 10 bold ‘).pack()
3. pass\_len = int Var()
4. length = Spinbox(root,from\_ = 8, to­\_ =32 ,textvariable =pass\_len, width =15).pack()

* **pass\_len** is an integer type variable that stores the length of a password.
* To select the password length we use **Spinbox()** widget.
* **Spinbox()** widget is used to select from a fixed number of values.Here the value from 8 to 32

1. Function to Generate Password
2. pass\_str = StringVar()
3. def Generator():
4. password = ‘ ‘
6. For x in range (0,4):
7. password = random.choice(string.ascii\_uppercase) + random.choice(string.ascii­\_lowercase) + random.choice(string.digits) + random.choice(string.punctuation)
8. For y in range (pass\_len.get() – 4) :
9. Password = password + random.choice(string.ascii\_uppercase + string.ascii\_lowercase + string.digits + string.punctuation)
10. Pass\_str.set (password)

* **pass\_str** is a string type variable that stores the generated password
* **password = “”** is the empty string
* first loop will generate a string of length 4 which is a combination of an uppercase letter,a lowercase letter , digits , and a special symbol and that string will store in password variable .
* The second loop will generate a random string of length entered by the user and add to the password variable. Here we minus 4 to the length of the user because we already generate the string of length 4.

We have done this because we want a password which must contain an uppercase ,a lowercase, a digit, and a special symbol.

Now the password is set to the pass\_str() variable.

* **Button()** widget used to display button on our window
* **Command** is called when the button is click.
* **Entry()** widget used to create an input text field.
* **Textvariable** used to retrieve the current text to the entry widget.

1. Function to copy Password
2. def Copy\_password () :
3. Pyperclip.copy ( pass\_str.get() )
5. Button (root, text = ‘COPY TO CLIPBOARD’, command = Copy\_password) . pack (pady = 5)

**pyperclip.copy()** used to copy the text to clipboard

**Python Password Generator Output**

**PASSWORD GENERATOR APPLICATION**

PASSWORD LENGTH

8

GENERATE PASSWORD

Ca1”\w51

COPY TO CLIPBOARD

**CONCLUSION**

With these steps, I have successfully created a random password generator project using python. I used popular tkinter library for rendering graphics in my display window and I also learned about pyperclip and random library.

I learned how to create buttons,input,textfield,labels and spinbox.In this way,this project helped me to learn about the concepts of random password generation.

**REFRENCES**

To conclude this project following refrences have been used.

**libraries**

* Tkinter
* pyperclip
* random
* string

**Websites**

* udemy
* coursera
* geeks for geeks
* geekflare

**Browser**

Google chrome