### 1. application interface of python all libraries.

## 1.**PyQT:**

PyQt is a set of Python bindings for the Qt application framework that runs on Windows, macOS, Linux, iOS, and Android.

## 2. Dear PyGui:

DearPyGui is a powerful, cross-platform, GPU-accelerated GUI framework for Python that allows for complete style and theme control.

## 3. PySimpleGUI:

PySimpleGUI is a wrapper package that currently supports four Python GUI frameworks namely: tkinter, Qt, WxPython, and Remi.

## 4. **Kivy:**

Kivy is an open-source, cross-platform Python GUI framework written mostly in Python and Cython.

### 5. Tkinter:

Tkinter is the default standard GUI package for Python. Since it is part of the Python standard library, Tkinter has grown in popularity and use.

### 6. Toga:

Toga is a Python native, OS native cross-platform GUI toolkit that is still in its early development but comes with lots of features and tons of base GUI components.

## 7. Qt for Python:

Qt for Python is the official set of Python bindings for the Qt framework, which is written by the developers of the Qt framework developed using C++.

#### 2. frame work (flutter) based on what? (Mobile)

Flutter is an open-source mobile application development framework created by Google. It helps you create high-quality, fast, and beautiful apps for iOS, Android, and the web – all from a single codebase.

Flutter is based on the Dart programming language. Dart is a modern, object-oriented programming language that is designed to be concise, expressive, and scalable. It is also compiled to native code, which makes Flutter apps fast and efficient.

## 3. what's the language which support data typed and not typed?

- 1. Python
- 2. Javascript
- 3.PHP

## 4. what's the hashmap? what's things based on it in python language?

Hash maps are indexed data structures. A hash map makes use of a <u>hash function</u> to compute an index with a key into an array of buckets or slots. Its value is mapped to the bucket with the corresponding index. The key is unique and immutable. Think of a hash map as a cabinet having drawers with labels for the things stored in them. For example, storing user information- consider email as the key, and we can map values corresponding to that user such as the first name, last name etc to a bucket.

### 5. how sort data which contais types of different data?

In Python we have the sort() method and the sorted() function for sorting. sort() only works for sorting lists. sorted() function is more versatile as we can use it to sort other data types and objects.

## 6. what's the language which support automatic carpage collection?

- 1. Python
- 2. Javascript
- 3.Java
- 4.C#
- 5.Swift

#### 7. what is the opposite for map in C++ and python?

The opposite of map is multimap

### 8. what is the advantages of c++ 2023?

Overall, C++ 2023 is a major update that introduces a number of new features and improvements that can make C++ programs more performant, safer, flexible, and interoperable. If you are looking for a powerful and versatile programming language that can be used to develop high-performance, safe, and flexible software, then C++ 2023 is a great choice.

### 9. what's the uses of assembly language?

Assembly language is used to directly manipulate hardware, access specialized processor instructions, or evaluate critical performance issues.

# 10. what's the difference between design pattern and architecture pattern?

- Design patterns are solutions to specific problems that occur
  within a software application. They are typically implemented
  at the code level and are used to solve problems such as how
  to create objects, how to pass data between objects, and how
  to handle errors.
- Architectural patterns are solutions to more general problems that occur in the overall architecture of a software system. They are typically implemented at the system level and are used to solve problems such as how to distribute components across different machines, how to handle scalability, and how to secure a system.

### 11. how make infinity loop?

We can create an infinite loop using while statement. If the condition of while loop is always True, we get an infinite loop.