1) What are the types of Applications?

Ans:- There are many types of applications and some of the examples are mentioned below:-

1.Web Applications

2.Mobile Applications

3.Desktop Applications

4.Enterprise Applications

5.Cloud Applications

6.Hybrid Applications

7.Games and Entertainment Applications

8.Utility Applications

9.Productivity Applications

10.Educational Applications

2) What is Programing?

Ans:-Programming, also known as coding or software development, is the process of creating instructions

that a computer can follow to perform specific tasks or solve problems.These instructions are written

using programming languages, which are designed to communicate with computers and other devices.

3) What is Python?

Ans:-Python is a high-level & interpreted programming language known for its simplicity and readability.

It was created by Guido van Rossum in 1991. Python is widely used in a various fields like:- Web development,

Data science, Automation, Artificial Intelligence, Machine Learning, and more.

7) How memory is managed in Python?

Ans:- The management of memory in python is handled automatically

by the Python memory manager, which is responsible for allocating, deallocating, and optimizing memory usage.

8) What is the purpose continuing statement in python?

Ans:- Skip the current iteration: The continue statement allows you to bypass certain parts of the loop and

move directly to the next iteration without executing the remaining code in the current loop cycle.

17) What are negative indexes and why are they used?

Ans:- In Python, negative indexes are used to access elements from the end of a sequence, such as a list,

string, or tuple, rather than from the beginning.

25) What is List? How will you reverse a list?

Ans:- A list in Python is an ordered collection of elements, which can be of any data type such as integers,

strings, or even other lists. Lists are mutable, meaning you can change their contents (add, remove, or

modify items) after they are created. Lists are created by placing elements inside square brackets [] and

separating them with commas.

26) How will you remove last object from a list?

Ans:- The pop() method removes and returns the last element from the list. If you don't need the returned value,

you can simply call pop() without assigning it to a variable.

27) Suppose list1 is [2, 33, 222, 14, and 25], what is list1 [-1]?

Ans:- 25

28) Differentiate between append () and extend () methods?

Ans:- The append() and extend() methods are both used to add elements to a list in Python,

but they differ in how they modify the list.

1. append() Method:

Purpose: The append() method adds a single element to the end of the list.

Syntax: list.append(element)

Effect: It adds the given element as a single item at the end of the list, even if the element

is another list or collection.

2. extend() Method:

Purpose: The extend() method adds multiple elements to the end of the list, which are provided as an

iterable (such as a list, tuple, or string).

Syntax: list.extend(iterable)

Effect: It takes each element of the iterable and adds it to the list one by one, effectively "expanding" the list.

30) How will you compare two lists?

Ans:- We can compare two lists in Python using the == operator to check if they are equal or not.

43) What is tuple? Difference between list and tuple.

Ans:- A tuple is a collection of ordered elements in Python. It is similar to a list but with a few key differences. Tuples are immutable, meaning that once a tuple is created, its elements cannot be changed, added, or removed.

Tuples are defined by enclosing the elements in parentheses ():

47) How will you create a dictionary using tuples in python?

Ans:- We can create a dictionary using tuples in Python by using the dict().

51) How Do You Traverse Through a Dictionary Object in Python?

Ans:- We can traverse through a dictionary in Python using a for loop with items(), keys(), or values().

52) How Do You Check the Presence of a Key in A Dictionary?

Ans:- We can check the presence of a key in a dictionary using the "in" keyword.

65) How Many Basic Types of Functions Are Available in Python?

Ans:- There are two type of Function in python & they are: 1. Built-in Functions,

2. User-defined Functions.

66) How can you pick a random item from a list or tuple?

Ans:- We can pick a random item from a list or tuple using the random.choice() function from the random module in Python.

67) How can you pick a random item from a range?

Ans:- To pick a random item from a range in Python, we can use the random.choice() function in combination with the range() function.

68) How can you get a random number in python?

Ans:- To get a random number in Python, we can use the random module, which provides several functions for generating random numbers.

like:- random.randint(),random.random(), random.uniform(a, b),random.choice(),

69) How will you set the starting value in generating random numbers?

Ans:- To set the starting value (or seed) for generating random numbers in Python, we can use the random.seed() function from the random module.

70) How will you randomize the items of a list in place?

Ans:- To randomize the items of a list in place, we can use the random.shuffle() function from the random module.

71) What is File function in python? What are keywords to create and write file?

Ans:- In Python, the file handling is done using built-in functions and methods. File handling allows you to open,

read, write, and close files.

83) Explain Exception handling? What is an Error in Python?

Ans:- When error occurs at runtime it is called exception handelling that exception called exception handelling.

There are 4 types of block:-

1. try.

2. except.

3. else.

4. finally.

84) How many except statements can a try-except block have? Name Some built-in exception classes:

Ans:- A try-except block can have multiple except statements. We can use multiple except blocks to handle different

types of exceptions, allowing you to define different handling strategies for different errors.

Some commonly used built-in exception classes include ZeroDivisionError, ValueError, IndexError, FileNotFoundError, TypeError, and more.

85) When will the else part of try-except-else be executed?

Ans:- The else part of a try-except-else block will be executed only if no exception is raised in the try block.

86) Can one block of except statements handle multiple exception?

Ans:- A single except block can handle multiple exceptions in Python. We can specify multiple exceptions in a single

except statement by using a tuple of exception types.

87) When is the finally block executed?

Ans:- The finally block is executed no matter what, whether an exception is raised or not in the try block. This means that the code

inside the finally block will run regardless of whether an exception was caught or not, and even if the program is terminated using

sys.exit() or a similar command.

88) What happens when „1‟ == 1 is executed?

Ans:- When the expression '1' == 1 is executed in Python, it will evaluate to False.

89) How Do You Handle Exceptions with Try/Except/Finally in Python?Explain with coding snippets.

Ans:- In Python, exceptions can be handled using the try, except, and finally blocks. This allows the program to catch runtime errors,

handle them appropriately, and still execute necessary cleanup code even if an error occurs.