Q1. Why do we call Python as a general purpose and high-level programming language?

1. Low level programming language can be understand by machine only. But high level

Programming language understand by anyone.

1. Thus, programmer don’t need to concentrate **on** low level activities like memory

management and security etc.

Q2. Why is Python called a dynamically typed language?

1. Because , in Python no need to provide data type

e.g. variable declaration – Int a,b – in c, java

but in python no need to mentioned int as data type .

Q3. List some pros and cons of Python programming language?

Pros :

1. **Simple and easy to learn**
2. **Freeware and Open Source**
3. **High Level Programming language**
4. **Platform Independent**
5. **Portability**
6. **Dynamically Typed:**
7. **Both Procedure Oriented and Object Oriented**
8. **Interpreted**
9. **Extensible**
10. **Embedded:**
11. **Extensive Library support**

Cons:

**1. Performance wise not up to the mark because it is interpreted language.**

**2. Its not used for mobile Applications**

Q4. In what all domains can we use Python?

1. For developing Desktop Applications

2. For developing web Applications

3. For developing database Applications

4. For Network Programming

5. For developing games

6. For Data Analysis Applications

7. For Machine Learning

8. For developing Artificial Intelligence Applications

9. For IOT

Q5. What are variable and how can we declare them?

. A Python variable is a name given to a memory location. It is the basic unit of storage in a program. [Python](https://www.geeksforgeeks.org/python-programming-language/) is not “dynamically typed language” so ,we do not need to declare variables before using them or declare their type. A variable is created the moment we first assign a value to it.

Q6. How can we take an input from the user in Python?

e.g. A= input(“Enter data”)

type caste

A= int(input(“Enter data”))

A=eval(input(“Enter the input”)) – it will evaluate data type as per user input

Q7. What is the default datatype of the value that has been taken as an input using input() function?

Default data type is String

Q8. What is type casting?

We can convert one type value to another type. This conversion is called Typecasting or

Type coersion.

The following are various inbuilt functions for type casting.

1. int()

2. float()

3. complex()

4. bool()

5. str()

Q9. Can we take more than one input from the user using single input() function? If yes, how? If no, why?

a,b= [int(x) for x in input("Enter 2 numbers :").split()]

print("Product is :", a\*b)

Q10. What are keywords?

Keywords in Python are unique reserved words that cannot use a keyword as a variable, function, or other identifiers. These special words are used to define the syntax and structure of the Python language.

Q11. Can we use keywords as a variable? Support your answer with reason.

Keywords cannot use as a variable. These special words are used to define the syntax and structure of the Python language

Q12. What is indentation? What's the use of indention in Python?

Indentation refers to the spaces at the beginning of a code line.

Where in other programming languages the indentation in code is for readability only, the indentation in Python is very important.

Uses:

Python uses indentation to indicate a block of code.

Python will give an error if we skip the indentation

Q13. How can we throw some output in Python?

By using print statement

Print(“Hello”)

Q14. What are operators in Python?

**Operator is a symbol that performs certain operations.**

**Python provides the following set of operators**

**1. Arithmetic Operators**

**2. Relational Operators or Comparison Operators**

**3. Logical operators**

**4. Bitwise oeprators**

**5. Assignment operators**

**6. Special operators**

Q15. What is difference between / and // operators?

/ is regular division (returns float) and // is floor division (returns int).

Floor division was introduced in python 3.

eg:

print(20/6) - 3.3333333333333335

print(20//6)- 3

Q18. What are boolean operator?

Logical operators are known as Boolean operator also.

-AND, OR , NOT

Q19. What will the output of the following?

1 or 0 = 1

0 and 0 = 0

True and False and True = False

1 or 0 or 0 = 1

Q20. What are conditional statements in Python?

Conditional statements are also called decision-making statements. We use those statements while we want to execute a block of code when the given condition is true or false.

Type of conditional statement in Python:

* If statement.
* If Else statement.
* Elif statement.
* Nested if statement.
* Nested if else statement.

Q21. What is use of 'if', 'elif' and 'else' keywords?

If statement

If statement is most usually used as a conditional statement.

**Example**

A=10

B=20

If A<B:

Print(“A is less than B”)

Elif statement

Elif is a shortcut of else if condition statements. In Python one or more conditions are used in the elif statement.

A=10

B=20

If A<B:

Print(“A is less than B”)

Elif a==b:

Print(“A and B are equal)

Else:

Print(“B is less than A”)

else statement

If else is a conditional statement. The statement itself says that if a given condition is true or false. True means executing the “if” statement to the output. False means executing the “else” statement to the output.

A=10

B=20

if A<B:

Print(“A is less than B”)

else:

Print(“B is less than A”)