Answers:

1. Python is an object-oriented, high-level programming language which is **easy for humans to understand**. A high-level language is used by humans. Python can understand this.
2. We don’t need to specify datatypes for variables like we do it in C== or Java. So, it can automatically understand the datatype while we assign a value.
3. Pros:

Wide variety of libraries

Built in data structures

Easy to use.

Highly understandable

Cons:

Runtime errors.

1. AI

ML

DATA SCIENCE

DATA ENGINEERING

1. Variables are the identifiers we use to identify any value. A variable can be assigned to a value. We can declare a variable like abc=5,\_123=”hi”

A variable name can never start with numbers. You can start with a symbol which is underscore(\_). Spaces are not appreciable.

1. One way is of using- input()

You can mention the datatype while getting the input from the user in order to avoid misinterpretation of the input datatype.

1. The default datatype is String.
2. Type casting is changing the data type of a value. For eg: string to int, int to float.
3. No. You can take only one input. If you want to take multiple input using single input() function you can use for loop condition. So that you can take input till the range that you have specified.
4. Keywords are some reserved words which a compiler can understand. For eg: if is a key word where a compiler can understand that it is a condition.
5. No. You cannot use keywords as variable. Keywords are basically sued to identify the structure of the program. If you use it as a variable, the compiler cannot identify from where the condition is getting started, from where you have assigned something.
6. Identation is the space between each block of code. Python is a sensitive language which shows indentation error if you don’t apply correct indentation.
7. Using “print” statement or logger.info in the case of boto3
8. Operators perform arithmetic and logical calculations. There are operators like arithmetic operators, assignment operators, comparison operators, logical operators, identity operators, membership operators, and boolean operators.
9. “/” is division operator

“//” is integer division

For eg:5/2=2.5

5//2 =2

1. Boolean operator gives you the result as true or false.

X=5,y=9

Print(x>y) gives you false.

1. 1 or 0 is 1

0 and 0 is 0

True and False and True is false

1 or 0 or 0 is 1

1. Conditional statements are of three types. If-else, nested-if,nested if-else.
2. If keyword is used to check the first condition of the value.

Elif can be used if the if condition is not true

Else can be used if all the above conditions are not true, finally the else block statement can be executed.