

Assignment Part-1

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

Ans. Python is designed in such a way that it is used in most of the technologies, eg. Data Engineering, Data Science, Software development and more. Python is a programming language which is user friendly, easy to understand or interpret.

Q2. Why is Python called a dynamically typed language?

Ans. In Python we do not have to worry about declaring a variable type as it states the kind of variable in runtime of the program. It also takes care of the memory management.

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

Ans. Pros :

It is open source.

Versatile and easy to read, learn and write

Dynamically typed and Object oriented and procedural programming language

Cons:

Speed in python is very slow if compared to other programming languages.

Memory consumption is too high

Difficult to develop mobile applications

Q4. In what all domains can we use Python?

Ans. Data engineering, AI, Machine Learning, Data science.

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

Ans. Variable is a container stores the values, In Python we don't have to declare them specifically.

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

Ans. Using the **input()** function we can take the input from the user in Python.

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

Ans. Default datatype of the value is string.

Q8. What is type casting?

Ans. Conversion of one data type into the other data type is called typecasting.

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

Ans. Yes we can take more than one input from the user using single input(), Below are the example

1 – split() method

```
1 x,y = input("Enter value for both").split()
2 print("Value of x : ",x)
3 print("Value of x : ",y)
4 print()
```

```
Enter value for both10 20
Value of x : 10
Value of x : 20
```

2 – List comprehension

```
1 user_01, user_02 = [user_01 for user_01 in input("Enter 2 users ").split()]
2 print("User name 01 : ",user_01)
3 print("User name 02 : ",user_02)
4 print()
```

```
Enter 2 users Arun Varun
User name 01 : Arun
User name 02 : Varun
```

Q10. What are keywords?

Ans. Keywords are special reserved words that have specific meanings and purposes and cannot be used for anything but those specific purposes.

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

Ans. No We cannot use Keywords as variable because, as these are predefined functions which are built to do perform a specific task.

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

Ans. Indentation in python refers to adding white space before a statement. Indentation is done to indicate a block of code.

Q13. How can we throw some output in Python?

Ans. Basic way to do output is to use print() statement.

Q14. What are operators in Python?

Ans. Operators are special symbols in python that carry out arithmetic or logical computation.

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

Ans. / is used if we want to return the floating point value and // will return only the quotient.

Q16. Write a code that gives following as an output.

iNeuronNeuronNeuronNeuron

```
1 my_variable = "iNeuron"  
2 print(my_variable * 4)
```

iNeuronNeuronNeuronNeuron

Ans. _____