Assignment-1

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

Python is called a general purpose as it is very common language and very easy to use in different kind of domains. Python is easy to use due to its readability and has high applications in data field also making it high level programming language.

1. **Why is Python called a dynamically typed language?**

Python is a dynamically typed language as it doesn’t know the type of variable until the code is run.

1. **List some pros and cons of Python programming language?**

Pros-It is easy to learn and read,It enhances productivity , It has a vast collection of libraries, It is an interpreted language.

Cons- It has speed limitations as it is dynamically typed and interpreted language, It can have runtime errors, It is not easy to use and consumes a lot of memory space.

1. **In what all domains can we use Python?**

We can use python in data domain, web development, OS development, Artificial Intelligence , Machine Learning.

1. **What are variable and how can we declare them?**

Variable is a name given to a specific memory location. To declare a variable we have to just name the variable , assign the required value to it and the data type of variable will be automatically determined from the value assigned.

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

We can use input() function to take input from user in python. Also we can provide an input with a custom message .

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

By default it will be string.

1. **What is type casting?**

Type casting is converting the variable data type into a certain data type in order to get the required results.

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

Yes we can do it by using split method.

1. **What are keywords?**

Keywords are special reserved words that has specific meaning and purpose and can’t be used for anything but those specific purposes.

Eg- print, input….

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

No we cannot use keywords as a variable as they are used to define the syntax and structure of the python language.

1. **What is indentation? What's the use of indentaion in Python?**

Indentation refers to adding white space before a statement to a particular block of code. It is used to tell the interpreter all the statements with the same space to the right, belong to the same code block.

1. **How can we throw some output in Python?**

By using raise keyword.

1. **What are operators in Python?**

Operators are some special symbols that designate some type of computation to be performed.

1. **What is difference between / and // operators?**

/ operator is used to do float division

// operator is used to do integer division

1. **Write a code that gives following as an output.**

iNeuroniNeuroniNeuroniNeuron

str\_data= “iNeuron”

full\_name= str\_data\*4

print(“”,full\_name)

1. **Write a code to take a number as an input from the user and check if the number is odd or even.**
2. **What are boolean operator?**

Boolean operators are simple words( AND, OR, NOT)and are used to compare values and evaluate expressions down to Boolean values, returining either true or false.

1. **What are conditional statements in Python?**

Conditional statements are used to automate decision making, in which python evaluates the code and see if it meets the specified condition. The conditions are evaluated and processed as true or false. Some conditional statements if statement,else statement, nested i.e elif statement.

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

If- if the condition following keyword if evaluates as true, the block of codes will execute.

Else- we can optionally add an else response that will execute if

the condition is false.

Elif- multiple conditions can be checked by including multiple elif checks after the initial if statement.

1. **Write a code that displays the sum of all the even numbers from the given list.**

**```**

**numbers = [12, 75, 150, 180, 145, 525, 50]**

**```**

a=12

b=150

c=180

d=50

print("addition of a+b+c+d",a+b+c+d)