**Assignment -29th Jan**

**1.Who developed python programming language?**

=Guido van Rossum has developed python programming language

**2.Which type of programming does Python support?**

= Object-oriented programming and structured programming are fully supported by Python

**3.Is Python Case sensitive when dealing with identifiers?** = Yes, Python is a case-sensitive language, i.e., it treats uppercase and lowercase characters differently.

**4.What is the correct extension of the Python file?**The correct file extension for Python files is **.py**

**5.Is Python code complied or interpreted?  
=Python is a interpreted language.**

**6.Name a few blocks of code used to define in Python language?**

**=** A block is a piece of Python program text that is executed as a unit. The following are blocks: a module, a function body, and a class definition.

if pwd == 'apple':

print('Logging on ...')

else:

print('Incorrect password.')

print('All done!')

The lines print(‘Logging on …’) and print(‘Incorrect password.’) are two separate code blocks. These ones happen to be only a single line long, but Python lets you write code blocks consisting of any number of statements.

**7.State a character used to give single-line comments in Python?**

**=** # is used for single line comments

**8.Mention functions which can help us to find the version of Python that we are currently working on?**

= The function sys. version can help us to find the version of python that we are currently working on.

**9.Python supports the creation of anonymous functions at runtime ,using a construct called** lambda.

**10.What does pip stand for Python?**

=Pip or preferred installer program is the standard package manager for Python which allows you to install and manage additional packages.

**11.Mention a few built in functions in Python?**

print( ) function=The print() function prints the specified message to the screen or another standard output device

Print(“Analytics Vidya is the largest Data Science Community over Whole world”)

Output: Analytics Vidya is the largest Data Science Community over Whole world  
Type Function:

The type() function returns the type of the specified object.

Example-   
list\_of\_fruits=(‘apple’,’banana’,’cherry’,’mango’)

Print(type(list\_of\_fruits))

Output:  
class ‘tuple’input( ) function= The input() function allows taking the input from the user.  
Example 2:   
a=input(‘Enter your name’)  
print(‘Hello, ‘+ a +’ to Analytics Vidhya’)  
Output:  
Enter your name: Chirag Goyal  
Hello, Chirag Goyal to Analytics Vidyaabs( ) function = The abs() function returns the absolute value of the specified number  
Example- negative\_number= -676  
print(abs(negative\_number))  
Output:  
676  
pow( ) function= The pow() function returns the calculated value of x to the power of y i.e, xy.  
x=pow(3,4)  
print(x)  
output:  
81dir( ) function= The dir() function returns all the properties and methods of the specified object, without the values.  
class Person:  
name=”Chirag Goyal”  
age=19  
country=”India”  
education=”IIT Jodhpur”  
print(dir(person))sorted( ) function= The sorted() function returns a sorted list of the specified iterable object.

Example- tuple=(“h”,”b”,”a”,”c”,”f”,”d”,”e”,”g”)  
print(sorted(tuple))  
Output:  
[‘a’,’b’,’c’,’d’,’e’,’f’,’g’,’h’]max( ) function= The max() function returns the item with the maximum value or the item with the maximum value in an iterable.  
names\_tuple=(‘Chirag’,’Kshitiz’,’Dinesh’)  
print(max(names\_tuple))  
Output:  
Kshitizround( ) function= The round() function returns a floating-point number that is a rounded version of the specified number, with the specified number of decimals.  
nearest\_number=round(87.76)  
print(nearest\_number)Output:  
88divmod( ) function= The divmod() function returns a tuple containing the quotient and the  
remainder when the first argument i.e, the dividend is divided by the second argument i.e, the divisor.  
example: x=divmod(7,3)  
print(x)  
output:  
(2,1)id( ) function= The id() function returns a unique id for the specified object  
example:names\_tuple=(‘Chirag’,’Kshitiz’,’Dinesh’,’Kartik’)  
print(id(names\_tuple))  
Output:  
140727158691425  
ord( ) function= The ord() function returns the number representing the Unicode code of a  
specified character.  
x=ord(“H”)  
print(x)  
output:  
72len( ) function= The len() function returns the count of items present in a specified object.  
example- fruit\_list=[“apple”,”banana”,”cherry”,”mango”,”pear”]  
print(len(fruit\_list))

Output  
5sum( ) function= The sum() function returns a number, the sum of all items in an iterable.  
list=[1,2,3,4,5]  
print(sum(list))  
Output:  
15help( ) function= The help() function is used to display the documentation of modules, functions, classes, keywords, etc. **12.What is the maximum possible length of an identifier in python?**=79 characters is the maximum possible length of an identifier in python  
**13.What are the benefits of using python?**Benefits:Scientific and mathematical computing  
Web developmentFinance and tradingSystem automation and administration  
Computer graphicsBasic game developmentSecurity and penetration testingGeneral and application-specific scripting

**14.How is the memory managed by Python?**= Memory management in Python involves a private heap containing all Python objects and data structures. The management of this private heap is ensured internally by the Python memory manager.

**15.How to install Python on windows and set path variables?**In the section entitled User Variables, double-click on the entry that says Path. Another window will pop up showing a list of paths. Click the New button and paste the path to your Python executable there. Once that's inserted, select your newly added path and click the Move Up button until it's at the top.

**16.Is indentation required in Python?  
=**The indentation in Python is very important. Python uses indentation to indicate a block of code.