Python Assignments

1.Use slicing concept find the following:

>>> lst = [40,50,20,30,90]

>>> a = lst[1:3]

>>> lst = list(range(30,100,10))

>>> print(lst)

>>> lst = list(range(10))

>>> print(lst)

>>> print(lst[2:6:2])

>>> lst = list(range(10))

>>> print(lst)

>>> print(lst[0:8:3])

>>> a = list(range(10))

>>> print(a[:-2])

>>> a = list(range(10))

>>> print(a[:-2:2])

>>> a = list(range(10))

>>> print(a[::4])

>>> a = list(range(10))

>>> print(a[2:-2])

>>> a = “Stuttgart”

>>> print(a[2:-2])

>>> a = “Stuttgart”

>>> print(a[-2:])

>>> a = list(range(10))

>>> print(a[2:3])

2.Write a python program to generate Fibonacci series.

3. In a given list of 10 numbers in this 10 number, check the odd and even number.

4. To create an object \_\_\_\_\_\_ is used.

 class

constructor

User-defined functions

In-built functions

5. \_\_\_\_\_ represents an entity in the real world with its identity and behaviour.

An object

An operator

A class

A method

6.

6. class pizza:

def \_\_init\_\_(self, money):

self.money = money

obj=pizza(99)

obj.amount=4

obj.total=2

print(obj.amount+len(obj.\_\_dict\_\_))

The output of the following code will be:

6

7

99

105

7.

lass test():

def \_\_repr\_\_(self):

return 'This is called'

def \_\_str\_\_(self):

return 'No! This is called'

s=test()

print(s)

This is called

Nothing is printed

Error

No! This is called

8. hasattr(obj, name) is used to?

access the attribute of the object

delete an attribute

check if an attribute exists or not

set an attribute

9.

The output to the following code will be:

class Engineer:

    'Base class for all students'

    def \_\_init\_\_(self, id\_no, score):

       self.id\_no = id\_no

       self.score = score

    def display (self):

       print("Roll no : ", self.id\_no,  ", Grade: ", self.score)

print(Engineer.\_\_doc\_\_)

None

Nothing is printed

Base class for all students

Error

10.

 predict the output

class Demo:

    def \_\_init\_\_(self):

        self.x = 0

class Derived\_Demo(Demo):

    def \_\_init\_\_(self):

        self.y = 1

def main():

    b = Derived\_Demo()

    print(b.x,b.y)

main()

 0 1

1 0

0 0

Error

11. Determine the type if Inheritance:

class prep():

    pass

class insta():

    pass

class python(prep, insta):

    pass

Multi-level inheritance

Multiple inheritance

Hierarchical inheritance

Single-level inheritance

12. Which one is not true?

A non-private method in a superclass can be overridden

A derived class is a subset of a superclass

The value of a private variable in the superclass can be changed in the subclass

When invoking the constructor from a subclass, the constructor of the superclass is automatically invoked

13.

 What will be the output of the following code:

class D:

    def \_\_init\_\_(self,x):

        self.x = x

    def count(self,x):

        self.x = self.x+1

class C(D):

    def \_\_init\_\_(self, y=0):

        D.\_\_init\_\_(self, 5)

        self.y = y

    def count(self):

        self.y += 1     

def main():

    obj = C()

    obj.count()

    print(obj.x, obj.y)

main()

5 0

5 1

0 1

Error

14. Need to create a crud operation in django

15. Wanted everyone to create a html with a image and some heading with a paragraph.

16. Create a app called employee with a table employee with fields "name, age, designation and salary"

Learn creating a button

Learn CRUD operation and implement that in employee table with a basic html view

17.      Write a Python class to convert an integer to a roman numeral and vice versa

18.      Write a Python class to find a pair of elements (indices of the two numbers) from a

given array whose sum equals a specific target number.

Note: There will be one solution for each input and do not use the same element

twice. 

Input: numbers= [10,20,10,40,50,60,70], target=50  
 Output: 3, 4

19.      Write a Python class to reverse a string word by word.   
 Input string : 'hello .py'  
 Expected Output : '.py hello'

20.      Write a Python class which has two methods get\_String and print\_String,

get\_String accept a string from the user and print\_String print the string in upper case.

21.      Write a Python class named Rectangle constructed by a length and width and a

method which will compute the area of a rectangle.

22.      Write a Python class named Circle constructed by a radius and two methods which

will compute the area and the perimeter of a circle.

23.      Write a Python program to get the class name of an instance in Python.

24.What is the data type of print(type('4.9'))

25.What is the data type of print(type(0x76FF))?

26.In Python 3, what is the output of type(range(19.3))?

27.What will be the output of the following programm?

X = “X”

Y = “X”

Print(x is y)

28.What would be the result of executing the following code?

Print(True\*2)

29.What is the result of the following code segment: int(12.3)

30.What character begins a single line comment?

31.What do we call it when we convert from one data type to another?

32.What is the result of the following operation 3+2\*2?

33. In Python 3, what is the type of the variable x after the following: x=2/2

34.A variable name can start with what 2 characters?

35. Is the following valid Python code:​

i\_am\_string = "hello world"​

i\_am\_string = 73​

i\_am\_string = True

36.Is “24hrs” a valid variable name?

37.Python programmers prefer to name most variables using...​

A) lower\_snake\_case​

B) UpperCamelCase​

C) CAPITAL\_SNAKE\_CASE​

D) lower-dash-case

38.Write a program to get 2 values from the user and perform the following

operations Add, Sub, Mul, Div, Power

39.What will be the output of the below code:

x1 = 5

y1 = 5

x2 = 'Hello'

y2 = 'Hello'

x3 = [1,2,3]

y3 = [1,2,3]

print(x1 is not y1)

print(x2 is y2)

print(x3 is y3)

40.What will be the output of the following code?

a = [10, 20]

b = a

b += [30, 40]

print(a)

print(b)

41.What will be the output of the following code?

a = 4

b = 11

print(a | b)

print(a >> 2)

42.What wil be the output of the following code?

x = 100

y = 50

print(x and y)

43.What is the output of the following assignment operator?

y = 10

x = y += 2

print(x)

44.Select the correct output of the following String operations

strOne = str("pynative")

strTwo = "pynative"

print(strOne == strTwo)

print(strOne is strTwo)

45.Guess the correct output of the following String operations

str1 = 'Welcome'

print(str1\*2)

46.Out of the following code?

myString = "pynative"

stringList = ["abc", "pynative", "xyz"]

print(stringList[1] == myString)

print(stringList[1] is myString)

47.Guess the correct output of the following code?

str1 = "PYnative"

print(str1[1:4], str1[:5], str1[4:], str1[0:-1], str1[:-1])

48.Which method should I use to convert String "welcome to the beautiful world

of python" to "Welcome To The Beautiful World Of Python"?

49. output of the following String operations

str1 = "my isname isisis jameis isis bond";

sub = "is";

print(str1.count(sub, 4))

50.What is the output of the following

  l = [None] \* 10

print(len(l))

51.What is the output of the following

list1 = ['xyz', 'zara', 'PYnative']

print (max(list1))

52.What is the output of the following

aList = [10, 20, 30, 40, 50, 60, 70, 80]

print(aList[2:5])

print(aList[:4])

print(aList[3:])

53.What is the output of the following

sampleList = [10, 20, 30, 40]

del sampleList[0:6]

print(sampleList)

54.    Python  program to print the following pattern

5432\*

543\*1

54\*21

5\*321

\*4321

55.       Write a program to print star in Alphabet letters (F,E,O) and Diamond Pattern.

56.      Write a program to Swap two number without using temporary variable.

57.      Program to print below pattern

           1

        2 3 2

    3 4 5 4 3

4 5 6 7 6 5 4

5 6 7 8 9 8 7 6 5

String Concept:

58. How do you count the number of occurrences of each character in a string?

59.     Write a python program to check whether given two strings are anagram or not?

“SiLeNt CAT", "LisTen AcT"

60.   Write a python program to reverse a given string with preserving the position of

Spaces.

Example : input : “I Am Not String”    output should be  “g ni rtS toNmAI”.

61.    Write a python program to reverse each word of a given string?

 For example, If “Python Concept Of The Day” is input string then output should

be “nohtyP tpecnoC fO ehT yaD”.

62.   Print All Substrings Of A String In Python

 Example : Input : Test

Output will be:,

T

Te

Tes

Test

e

es

est

s

st

t

63. Try the below program and come up with the solution before EOD.

     ATM Program:

In the ATM program, the user has to select an option from the options displayed on the screen. The options are related to withdraw the money, deposit the money, check the balance, and exit.

To withdraw the money, we simply get the withdrawal amount from the user and remove that amount from the total balance and print the successful message.

To deposit the money, we simply get the deposit amount from the user, add it to the total balance and print the successful message.

To check balance, we simply print the total balance of the user.

Once the user give exit option then he should return to the home page or

initial screen.

Set balance is 100000 in the program itself.

64. Find the smallest number in the given list

65.  Find the biggest number in the given list

66. Write a program to check whether the given number is ODD or EVEN

 67. Program to sort a given string

68.Program to print star pyramid pattern

69.Program to print number pyramid pattern

70.Program to split (with a symbol) and join (add new symbol) a string

71. Program using all the Build – in Datatypes

72.  Programs using Lists, Tuples and Dictionaries (include all the types) concepts

73.  Write a Python program to print the following string in a specific format.

               Twinkle, twinkle, little star,

                              How I wonder what you are!

                                              Up above the world so high,

                                              Like a diamond in the sky.

               Twinkle, twinkle, little star,

                              How I wonder what you are

74.      Write a Python program to get the Python version you are using

75.      Write a Python program to display the current date and time.

76.  Write a Python program which accepts a sequence of comma-

separated numbers

from user and generate a list and a tuple with those numbers.

*Sample data :*3, 5, 7, 23​

*Output :*​

List : ['3', ' 5', ' 7', ' 23']​

Tuple : ('3', ' 5', ' 7', ' 23')

77. Write a Python program to find whether a given number (accept from the

user) is even or odd, print out an appropriate message to the user.

78.  Write a Python program to test whether a passed letter is a vowel or not.