**Lab\_1\_Assignment**

1. # The following line won't run because of a syntax error

print("hi)

Ans: print('hi')

2. # Exercise 2

''' The following lines won't run properly,

even if the syntax error in the line above is corrected,

because of a run-time error '''

print(hello)

Ans:

hello='Hi, Good Morning'

print(hello)

3. # Display a string (greeting message) directly

Ans: print('Hey, Good Morning')

4. # Display the contents of a string variable

Ans: a='Hello'

print(a)

5. # Display the string which contains single quotes

Ex: Indian's

Ans: print("Indian's")

6. # Display the string which contains Double Quotes

Ex: Students,"Welcome to SOIS".

Ans: print('Students,"Welcome to SOIS"')

6. Read two numbers in (user input) and store as num1 and num2, Calculate the sum, difference, product, Quotient, reminder, power

Ans: num1=int(input())

num2=int(input())

print(num1+num2)

print(num1-num2)

print(num1\*num2)

print(num1/num2)

print(num1%num2)

print(num1\*\*num2)

7. check the value of num1 is integer or not?

Ans:

num1 = 20

if isinstance(num1, int):

print(num1, 'is an integer')

else:

print(num1, 'is not an integer!!')

8. convert into integer

Ans: a=input()

print(type(a))

b=int(a)

print(type(b))

print(b)

9. Find the datatype for the variable num1 and num2.

Ans: a=10.0

b='Hello'

print(type(a))

print(type(b))

10. read the float value from the user and print the number rounded to 2 decimal places

Ans: number=float(input())

print(round(number,2))

11. read the float value from the user and print the absolute value

Ans:

number = float(input("Enter a float value: "))

absolute\_value = abs(number)

print(absolute\_value)

12. Store different type values in the variable

Ans:

String

my\_string = "Hello, World!"

print("String:", my\_string)

numeric

my\_integer = 42

my\_float = 3.14

print("Integer:", my\_integer)

print("Float:", my\_float)

complex

my\_complex = 2 + 3j

print("Complex:", my\_complex)

list

my\_list = [1, 2, 3, "four", 5.0]

print("List:", my\_list)

dictionary

my\_dict = {

"name": "Alice",

"age": 30,

"city": "Mangalore"

}

print("Dictionary:", my\_dict)

set

my\_set = {1, 2, 3, 4, 5}

print("Set:", my\_set)

tuple

my\_tuple = (10, 20, 30, "forty")

print("Tuple:", my\_tuple)

13. Find the data type for the above variables

Ans:

print("Data Type of my\_string:", type(my\_string))

print("Data Type of my\_integer:", type(my\_integer))

print("Data Type of my\_float:", type(my\_float))

print("Data Type of my\_complex:", type(my\_complex))

print("Data Type of my\_list:", type(my\_list))

print("Data Type of my\_dict:", type(my\_dict))

print("Data Type of my\_set:", type(my\_set))

print("Data Type of my\_tuple:", type(my\_tuple))

14. # Display the number of letters in the string

greeting = "Welcome to Python Programming"

Ans: print(len(greeting)) (including spaces)

print(len(greeting.replace(" ","")))

15. read the first name and last name from the user and combine first name and last name. combine name and greeting message

Ans: a=input()

b=input()

full\_name=a+" "+b

print('Hi ',full\_name)

16. Display the string with space

Ex: firstname lastname

firstname=input()

lastname=input()

full\_name=firstname+" "+lastname

print('Hi ',full\_name)

17. Display first two characters from the name

Ans:

a=input()

print(a[:2])

18. Display last three characters from the name

Ans:

a=input()

print(a[-3:])

19. Display 3rd character to last character

Ans:

a=input()

print(a[2:])

20. Display 3rd to 5th character

Ans:

a=input()

print(a[2:5])

21. Create a list of food with two elements.

Ans:

lst=['Idli','Dosa']

print(lst)

22. Add one more to the food list using .append()

Ans:

lst=['Idli','Dosa']

print(lst)

lst.append('Parotta')

print(lst)

23. Add two more food strings to food using .extend()

Ans:

lst1=['Idli','Dosa']

print(lst1)

lst2=['Bread','Bun']

print(lst2)

lst1.extend(lst2)

print(lst1)

24. Count total number of items in the list

Ans:

lst1=['Idli','Dosa','Poori','Chapathi','Sandwich']

print(len(lst1))

25. Print the first two items in food using slicing notation

Ans:

lst1=['Idli','Dosa','Poori','Chapathi','Sandwich']

print(lst1[0:2])

26. Print the last item in food using index notation

Ans:

lst1=['Idli','Dosa','Poori','Chapathi','Sandwich']

print(lst1[-1])

27. Debug: Program is to check the given number is odd or even

ans:

number = int(input("Enter a number: "))

x = number%2

if x == 0:

print("The number is Even.")

else:

print("The number is Odd.")

28. Debug: Program is to convert centigrade to Fahrenheit

Ans:

c = float(input("Enter temperature in Centigrade: "))

f = 9\*(int(c))/5 +32

print("Temperature in Fahrenheit is: ",f)

29. Debug:

ans:

count = int(input("Enter the count of numbers: "))

i = 0

summ= 0

for i in range(count):

x = int(input("Enter an integer: "))

summ = summ + x

avg = summ/count

print("The average is: ", avg)

30. Prove : strings is not mutable

lists are mutable

Ans:

str='HelloWorld'

str[0]='A' (Gives Error since it is not mutable)

print(str)

lst=['CSE','CYS','BDA','VLSI']

lst[0]='AIML'

print(lst) (Since lst are mutable the first element is replaced with new element)