### PLASMA DONOR APPLICATION

### ASSIGNMENT-II

### 1.WRITE A CALCULATOR PROGRAM IN PYTHON

# Program make a simple calculator

# This function adds two numbers

def add(x, y):

return x + y

# This function subtracts two numbers

def subtract(x, y):

return x - y

# This function multiplies two numbers

def multiply(x, y):

return x \* y

# This function divides two numbers

def divide(x, y):

return x / y

print("Select operation.")

print("1.Add")

print("2.Subtract")

print("3.Multiply")

print("4.Divide")

while True:

# take input from the user

choice = input("Enter choice(1/2/3/4): ")

# check if choice is one of the four options

if choice in ('1', '2', '3', '4'):

num1 = float(input("Enter first number: "))

num2 = float(input("Enter second number: "))

if choice == '1':

print(num1, "+", num2, "=", add(num1, num2))

elif choice == '2':

print(num1, "-", num2, "=", subtract(num1, num2))

elif choice == '3':

print(num1, "\*", num2, "=", multiply(num1, num2))

elif choice == '4':

print(num1, "/", num2, "=", divide(num1, num2))

# check if user wants another calculation

# break the while loop if answer is no

next\_calculation = input("Let's do next calculation? (yes/no): ")

if next\_calculation == "no":

break

else:

print("Invalid Input")

**Output**

Select operation.

1.Add

2.Subtract

3.Multiply

4.Divide

Enter choice(1/2/3/4): 3

Enter first number: 15

Enter second number: 14

15.0 \* 14.0 = 210.0

Let's do next calculation? (yes/no): no

### 2.WRITE A PROGRAM CONCATENATE A STRING IN PYTHON

str1="Hello"

str2="World"

print ("String 1:",str1)

print ("String 2:",str2)

str=str1+str2

print("Concatenated two different strings:",str)

OUTPUT:

String 1: Hello String 2: World Concatenated two different strings: HelloWorld

### 3.WRITE A PROGRAM TO REVERSE A STRING IN PYTHON

# reverse a string using reversed ()

# Function to reverse a string

**def** reverse(str):

    string = "".join(reversed(str)) # reversed() function inside the join() function

**return** string

s = "JavaTpoint"

**print** ("The original string is : ",s)

**print** ("The reversed string using reversed() is : ",reverse(s) )

OUTPUT: 

('The reversed string using reversed() is : ', 'tniopTavaJ'

4.WRITE A PROGRAM TO SLICE A STRING IN PYTHON



**OUTPUT:**

String slicing

AST

SR

GITA

5. WHY IS PYTHON A POPULAR PROGRAMMING LANGUAGE

**Python is easy to learn**

One of the largest hurdles for those who are interested in getting into coding is that programming languages really are their own languages; they have their own rules, syntax, grammatical structures, etc., and they often necessitate learning a completely new vocabulary.

But Python is different. More so than nearly any other programming language, Python reads and writes very similarly to standard English. It uses a simplified syntax with an emphasis on natural language, for a much easier learning curve for beginners. And, because Python is free to use and is supported by an extremely large ecosystem of libraries and packages, it’s often the first-choice language for new developers.

6.WHAT ARE THE OTHER FRAMEWORKS THAT CAN BE USED WITH PYTHON

* Pyramid. Another open-source Python framework on our list is Pyramid. ...
* TurboGears. TurboGears is an open-source, data-driven, full-stack Python framework. ...
* Web2py. Web2py is a highly scalable, open-source full-stack Python framework. ...
* CherryPy. ...
* Flask. ...
* Sanic.

7.FULL FORM OF WSGI

The **Web Server Gateway Interface** (WSGI, pronounced whiskey or WIZ-ghee) is a simple calling convention for web servers to forward requests to web applications or frameworks written in the Python programming language. The current version of WSGI, version 1.0.