ASSIGNMENT 2

```python
#1. Calculator program using python

def add(x, y):
    return x + y
def subtract(x, y):
    return x - y
def multiply(x, y):
    return x * y
def divide(x, y):
    return x / y

print("Select operation.")
print("1.Add")
print("2.Subtract")
print("3.Multiply")
print("4.Divide")

while True:
    choice = input("Enter choice(1/2/3/4): ")
    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))
        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: 10

Enter second number: 3

10.0 * 3.0 = 30.0

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

```python
#2. string concatenation,slicing,reversing using Python programming
str1="IBM"
str2="Assignment 2"
print ("String 1:",str1)
print ("String 2:",str2)
str=str1+str2
print("Concatenated two different strings:",str)
def reverse(str):
    str = str[::-1]
    return str

s = "Assignment"
print ("The original string  is : ",s)
print ("The reversed string using extended slice operator  is :
",reverse(s))
print("Sliced string is:",str2[:4])
```
OUTPUT:

String 1: IBM

String 2: Assignment 2

Concatenated two different strings: IBMAssignment 2

The original string is : Assignment

The reversed string using extended slice operator is : tnemngissA

Sliced string is: Assi

3. Why is python a popular programming language?

ANS: *Python is easy to learn.
        *It uses a simplified syntax with an emphasis on natural language
        *It is an easier learning curve for beginners to learn programming.
        *It is free to use and an open source source.
        *It is supported by an extremely large ecosystem of libraries and
packages.
        *we write less code and those codes solve the complex problems.
        *It is highly portable.

4. What are the other frameworks that can be used with python?
ANS: Django.
            Pyramid.
            TurboGears.
            Web2py.
            CherryPy.
            Flask.
            Sani

5. Expansion of WSGI : Web Server Gateway Interface