Assignment – 2

Ques- 1 For a given input string “Python is a case sensitive language”.

Write python code for the following:

a. Find the length of the input string.

b. Reverse the order of the string in one line code.

c. Using Slice function store “a case sensitive” in new string.

d. Replace “a case sensitive” with “object oriented”.

e. Find index of substring “a” in the given input string.

f. Remove the white spaces from the given input string.

Ans-1

Code:

```
a='Python is a case sensitive language'
print ("Length of string=",len (a))
print (a[::-1])
b=a[10:26:1]
print (b)
replaced=a.replace ("a case sensitive", "object oriented")
print (replaced)
print(a.index ("a"))
print(a.replace (" "," "))
```

Output:

```
Length of string= 35
egaugnal evitisnes esac a si nohtyP
a case sensitive
Python is object oriented language
10
Python is a case sensitive language
```

Ques-2 Store your name, SID, department name and CGPA into different variables.

With the help of String formatting print the following output: Hey, ABC Here! My SID is 2110XXXX I am from XYZ department and my CGPA is 9.9

Ans -2

Code:

```
name="abc"
SID="2210XXXX"
department="XYZ"
CGPA=9.9
print ("Hey,", name, "here! \nMy SID is", SID,"\nI am from", department, "department and my cgpa is", CGPA)
```

Output:

```
Hey, abc here!
My SID is 2210XXXX
I am from XYZ department and my cgpa is 9.9
```

Ques 3-For a=56 and b=10 with the help of bitwise operators calculate the following:

a. a&b

b. a|b

c. a^b

d. Left shift both a and b with 2 bits.

e. Right shift a with 2 bits and b with 4 bits.

Code:

```
a=56
b=10
print ("a & b=", a&b)
print("a | b=",a|b)
print("a ^ b=", a^b)
print("left shifting both a and b with 2 bits=", a<<2, "=", b<<2)
print("right shifting a with 2 bits and b with 4 bits=", a>>2, "=", b<<4)
```

Output:

```
a & b= 8
a | b= 58
a ^ b= 50
left shifting both a and b with 2 bits= 224 = 40
right shifting a with 2 bits and b with 4 bits= 14 = 160
```

Ques 4- Write a python program to find the greatest of three numbers entered by the user.

Code:-

```
num1=float (input ("enter first number:"))
num2=float (input ("enter second number:"))
num3=float (input ("enter third number:"))
print(" The greatest of the three number is:", max (num1, num2, num3))
```

Output :

```
enter first number:7
enter second number:9.88
enter third number:11.9999
 The greatest of the three number is: 11.9999
```

Ques 5- Write a python program to check if the word “name” is present in the string entered by the user (Print : “Yes” or “No”).

Code:

```
str=input("enter the string:")
if "name" in str:
    print ("Yes")
else:
    print("No")
```

Output:

```
enter the string:WELCOME TO PEC
No
PS C:\Users\Administrator> & C:/
/Desktop/c++/assignment ques 5 a
enter the string:name
Yes
```

Ques 6- For any three lengths, there is a simple test to see if it is possible to form a triangle. If any of the three lengths is greater than the sum of the other two, then you cannot form a triangle. Otherwise, Enter three sides of a triangle, converts them to integers, and to check whether the given input lengths can form a triangle or not (Print : “Yes” or “No”).

Code:

```
len1=float (input ("Enter length of side 1:"))
len2=float (input ("Enter length of side 2:"))
len3=float (input ("Enter length of side 3:"))
if len1+len2>len3 and len2+len3>len1 and len1+len3>len2:
    print ("Yes")
else:
    print("No")

```

Output :

```
Enter length of side 1:5
Enter length of side 2:4
Enter length of side 3:3
Yes
PS C:\Users\Administrator>
/Desktop/c++/assignment 2 q
Enter length of side 1:34
Enter length of side 2:0
Enter length of side 3:36
No
```