Python assignment

Q1. 1 .wap inputting your name which will be printed in the reverse order String manipulation

```
def reverse(s):

   if len(s) == 0:
      return s
   else:
      return reverse(s[1:]) + s[0]

s = "tribhuwan"

print ("The original string  is : ",end="")
print (s)

print ("The reversed string(using recursion) is : ",end="")
print (reverse(s))
```

Q2. Create a Calculator program using four functions

```
def add(x, y):

  return x + y

def sub(x, y):

  return x - y

def mult(x, y):

  return x * y

def div(x, y):

  try:

    return x / y

  except:

    print("invalid input",y)


print("Select operation:")

print("1.Add")

print("2.Subtract")

print("3.Multiply")

print("4.Divide")


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

n1 = float(input("Enter first number: "))
```

```
n2 = float(input("Enter second number: "))

if a== '1':
  print(n1,"+",n2,"=", add(n1,n2))

elif a== '2':
  print(n1,"-",n2,"=", sub(n1,n2))

elif a == '3':
  print(n1,"*",n2,"=", mult(n1,n2))

elif a == '4':
  print(n1,"/",n2,"=", div(n1,n2))
else:
  print("Invalid input")
```

3. **List Manipulation program identify Even & Odd Number separately**

```
def EvenOdd(a):

   n = int(input("Enter number of elements:"))
    for i in range(1, n + 1):
        b = int(input("Enter element:"))
        a.append(b)
   even = []
   odd = []
   dict = {}
   evenadd = 0
   oddadd = 0
   evencount = 0
   oddcount = 0
   for j in a:
      if (j % 2 == 0):
          even.append(j)
```

```
        evenadd += j
        evencount += 1
    else:
        odd.append(j)
        oddadd += j
        oddcount = oddcount + 1
print("The even list", even)
print("The odd list", odd)
dict["even"] = even
dict["odd"] = odd
dict["even Addition"] = evenadd
dict["odd Additoin"] = oddadd
dict["Evencount"] = evencount
dict["Oddcount"] = oddcount
print(dict)
```