FIRST SEMESTER MCA(2020 SCHEME) PRACTICAL EXAMINATION

JUNE-JULY 2021

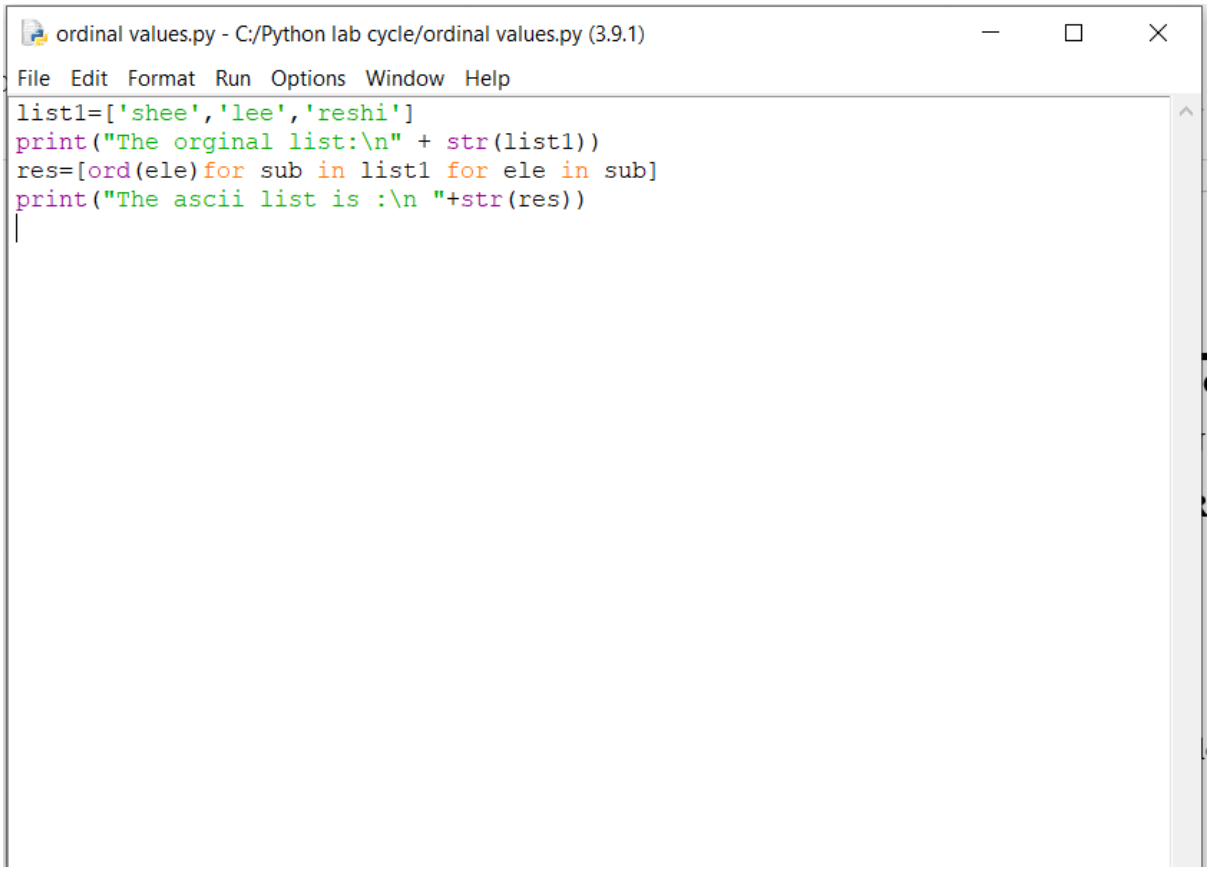
20MCA131 PROGRAMMING LAB

Date:02-07-2021 **Reg:no: ICEMCA-2037**

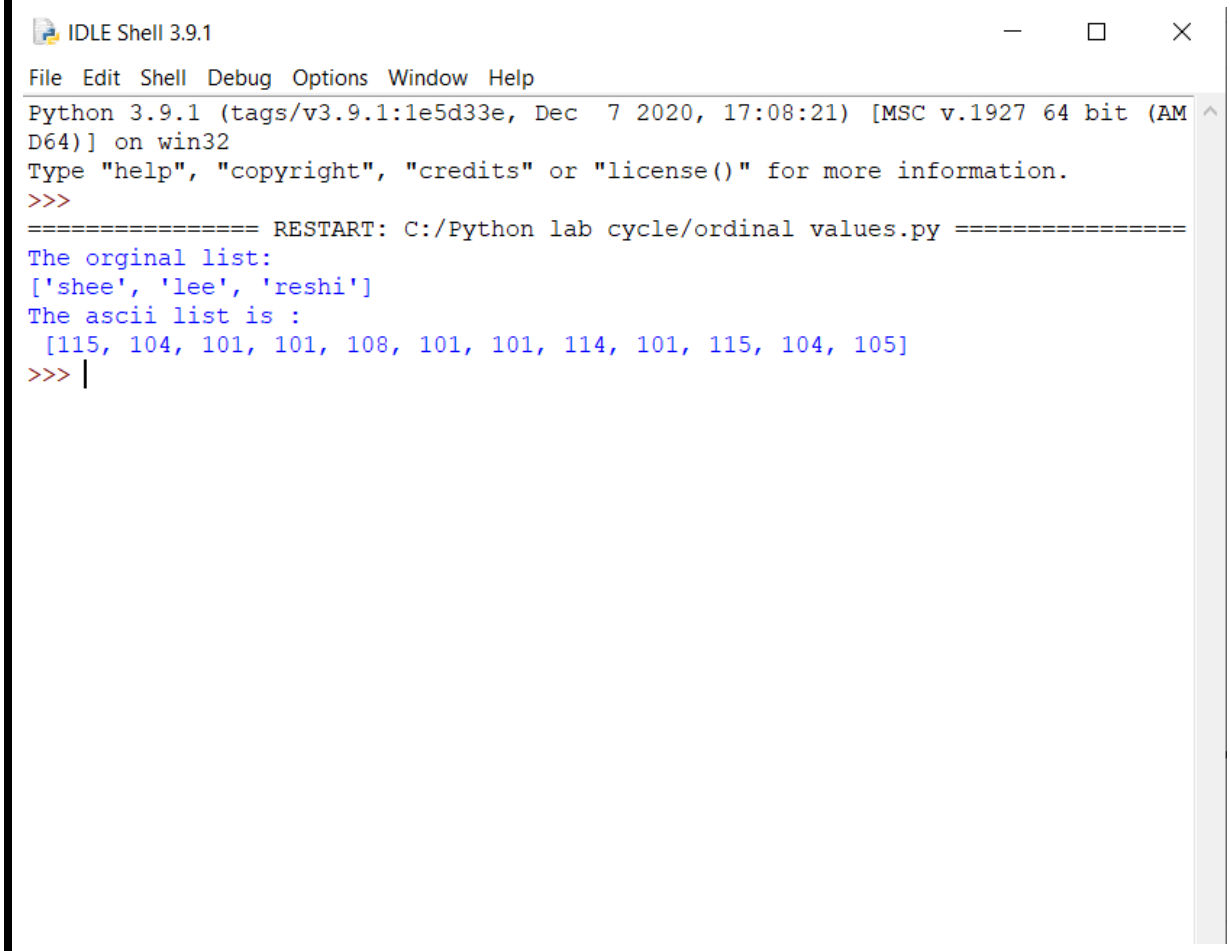
Time:1:00pm-4:00pm

1. **List ordinal value of each element of a word?**

PROGRAM



OUTPUT


IDLE Shell 3.9.1
File Edit Shell Debug Options Window Help
Python 3.9.1 (tags/v3.9.1:1e5d33e, Dec 7 2020, 17:08:21) [MSC v.1927 64 bit (AM
D64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: C:/Python lab cycle/ordinal values.py ==========
The orginal list:
['shee', 'lee', 'reshi']
The ascii list is :
[115, 104, 101, 101, 108, 101, 101, 114, 101, 115, 104, 105]
>>>

2. **Create a package graphics with modules rectangle, Circle and sub-package 3D graphics with modules cuboid and sphere . Include methods to find area and perimeter of respective figures in each module. Write programs that finds area and perimeter of figure by different importing statement?**

PROGRAM

Graphics main.py - C:/Python lab cycle/Graphics main.py (3.9.1)

File Edit Format Run Options Window Help

```
from graphics.rectangleAPFunction import*
from graphics.CircleAPFunction import*
from graphics.dgraphics.cuboidAPFunction import*
from graphics.dgraphics.sphereAPFun import*
num1=int(input("enter length of rectangle"))
num2=int(input("enter breadth of a rectangle"))
print("area = ",Recarea(num1,num2))
print("perimeter =",Rperimeter(num1,num2))
radius=int(input("enter the radius of a circle"))
print("Circle area =",CArea(radius))
print("Circle perimeter =", CPerimetr(radius))
radius=int(input("enter radius of Sphere"))
print("area of sphere =",Asphere(radius))
print("perimeter of sphere =",Psphere(radius))
edge=int(input("enter the edge of cuboid"))
l=int(input("enter the length of cuboid"))
b=int(input("enter the breadth of cuboid"))
h=int(input("enter the heigtht of cuboid"))
print("area of cuboid",Acuboid(edge))
print("perimeter of cuboid",Pcuboid(l,b,h))
```

circle.py - C:/Python lab cycle/graphics/circle.py (3.9.1)

File Edit Format Run Options Window Help

```
#circle area
def CArea(r):
 result=3.14*r*r
 return result
#circle perimeter
def CPerimetr(r):
 result=2*3.14*r
 return result
```

rectangle.py - C:/Python lab cycle/graphics/rectangle.py (3.9.1)

File Edit Format Run Options Window Help

```
#area of rectangle
def Recarea(w,l):
 result=w*l
 return result
#perimeter of rectangle
def Rperimeter(w,l): result=2*(l+w)
 return result
```

cuboid.py - C:/Python lab cycle/graphics/dgraphics/cuboid.py (3.9.1)

File Edit Format Run Options Window Help

```
#area of cuboid
def Acuboid(a):
 result=6*a*a
 return result
#perimeter of cuboid
def Pcuboid(l,b,h):
 result=4*(l+b+h)
 return result
```

sphere.py - C:/Python lab cycle/graphics/dgraphics/sphere.py (3.9.1)

File Edit Format Run Options Window Help

```
#area and perimeter of sphere fun
def Asphere(r):
 result=4*3.14*r*r
 return result
#perimeter fun
def Psphere(r):
 result=(4/3)*3.14*r*r*r
 return result
```

OUTPUT

```
enter the length of rectangle:4
enter the breadth of recxtangle:3
area= 12
perimeter= 14
enter the rtadius of circle:6
circle area= 113.03999999999999
circle area= 37.68
enter the rtadius of sphere:3
sphere area= 113.03999999999999
perimeter of sphere= 113.03999999999998
enter the edge of cuboid:3
enter the length of cuboid:5
enter the breadth of cuboid:8
enter the height of cuboid:9
area of cuboid= 54
perimeter of cuboid= 88
>>>
```