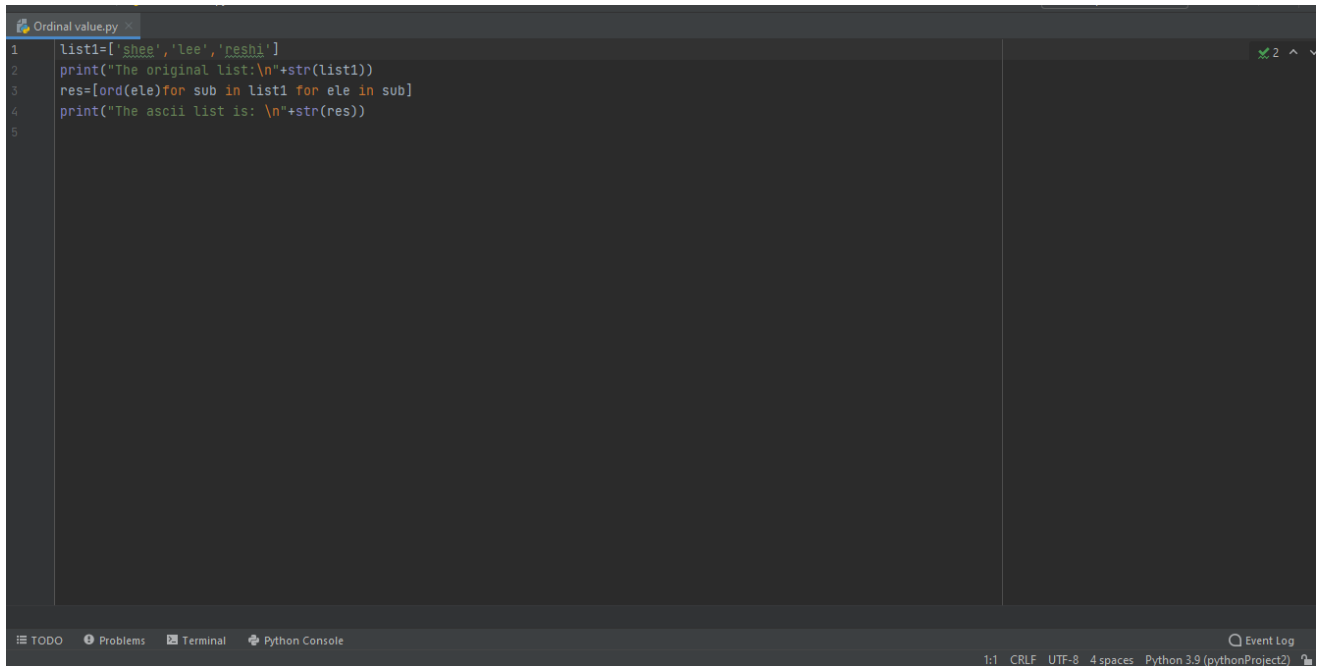


1.List ordinal value of each element of a word

Program

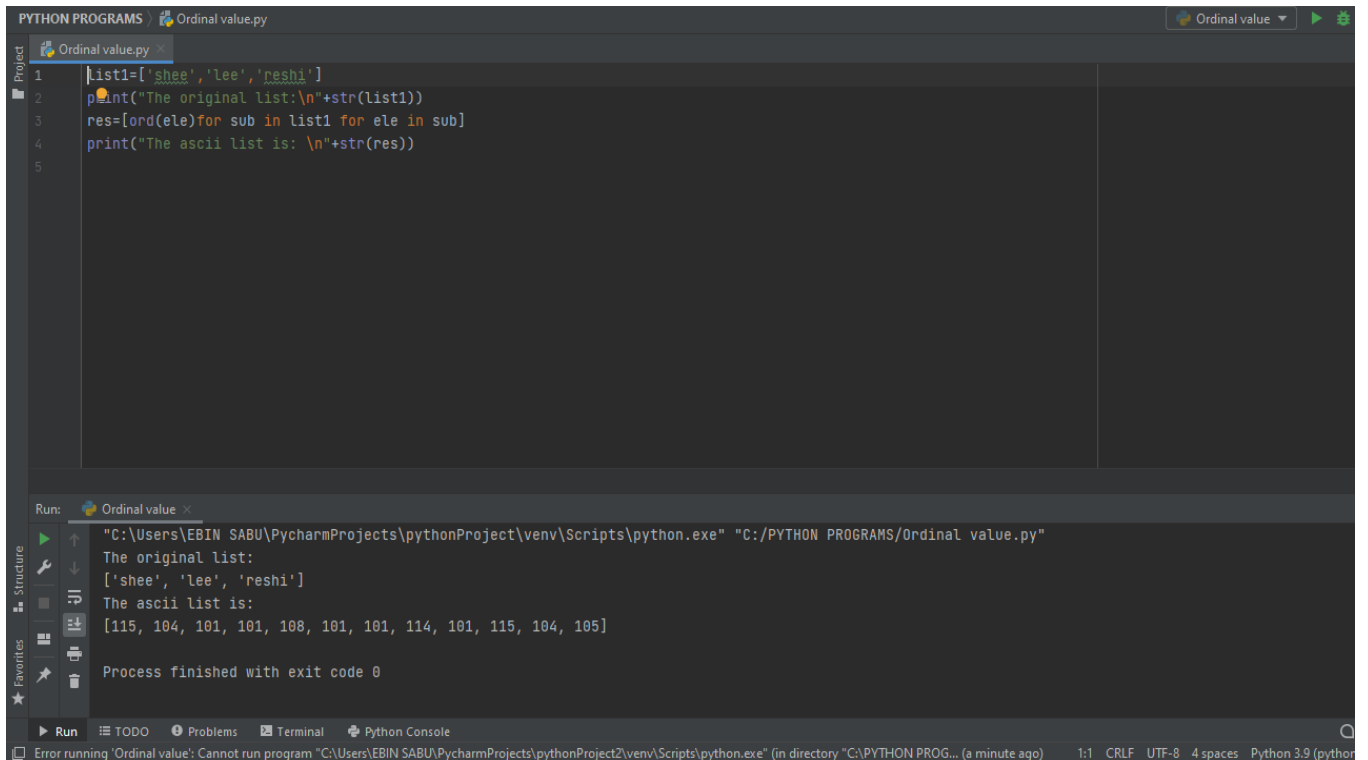


```
Ordinal value.py
1 list1=['shee','lee','reshi']
2 print("The original list:\n"+str(list1))
3 res=[ord(ele)for sub in list1 for ele in sub]
4 print("The ascii list is: \n"+str(res))
5
```

The screenshot shows a code editor with a file named 'Ordinal value.py'. The code defines a list 'list1' containing the words 'shee', 'lee', and 'reshi'. It then prints the original list and calculates a new list 'res' where each element is the ordinal value (ASCII code) of each character in the words of 'list1'. The code is as follows:

```
list1=['shee','lee','reshi']
print("The original list:\n"+str(list1))
res=[ord(ele)for sub in list1 for ele in sub]
print("The ascii list is: \n"+str(res))
```

Output-1



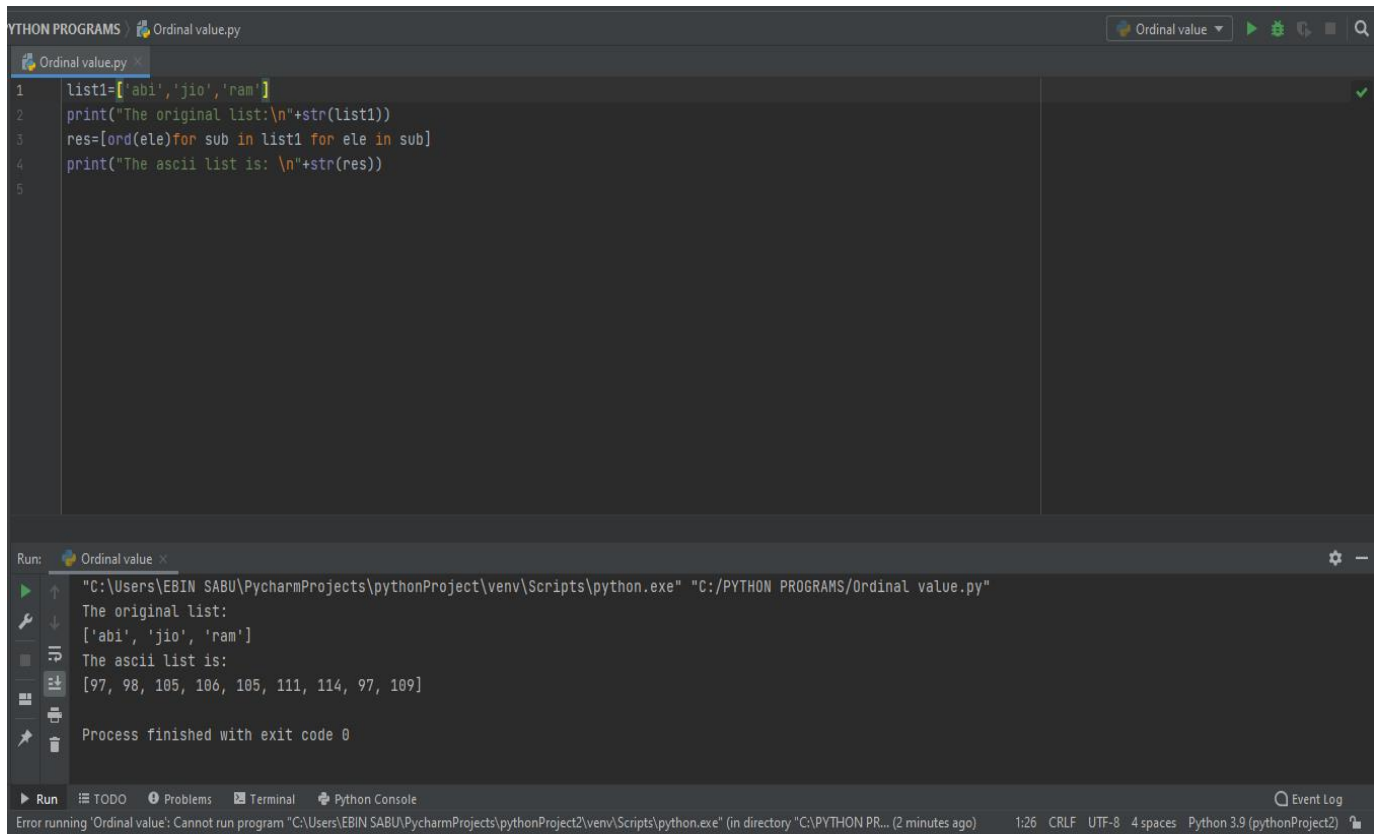
```
PYTHON PROGRAMS Ordinal value.py
Ordinal value
1 list1=['shee','lee','reshi']
2 print("The original list:\n"+str(list1))
3 res=[ord(ele)for sub in list1 for ele in sub]
4 print("The ascii list is: \n"+str(res))
5
```

The screenshot shows the same code editor as before, but with the 'Run' button clicked. The output is displayed in the 'Run' console at the bottom. The output shows the original list and the calculated ASCII list.

```
Run: Ordinal value
"C:\Users\EBIN SABU\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:/PYTHON PROGRAMS/Ordinal value.py"
The original list:
['shee', 'lee', 'reshi']
The ascii list is:
[115, 104, 101, 101, 108, 101, 101, 114, 101, 115, 104, 105]
Process finished with exit code 0
```

The output shows the original list ['shee', 'lee', 'reshi'] and the calculated ASCII list [115, 104, 101, 101, 108, 101, 101, 114, 101, 115, 104, 105]. The process finished with exit code 0.

Output-2



The screenshot displays the PyCharm IDE interface. The top editor window, titled 'Ordinal value.py', contains the following Python code:

```
1 list1=['abi','jio','ram']
2 print("The original list:\n"+str(list1))
3 res=[ord(ele)for sub in list1 for ele in sub]
4 print("The ascii list is: \n"+str(res))
5
```

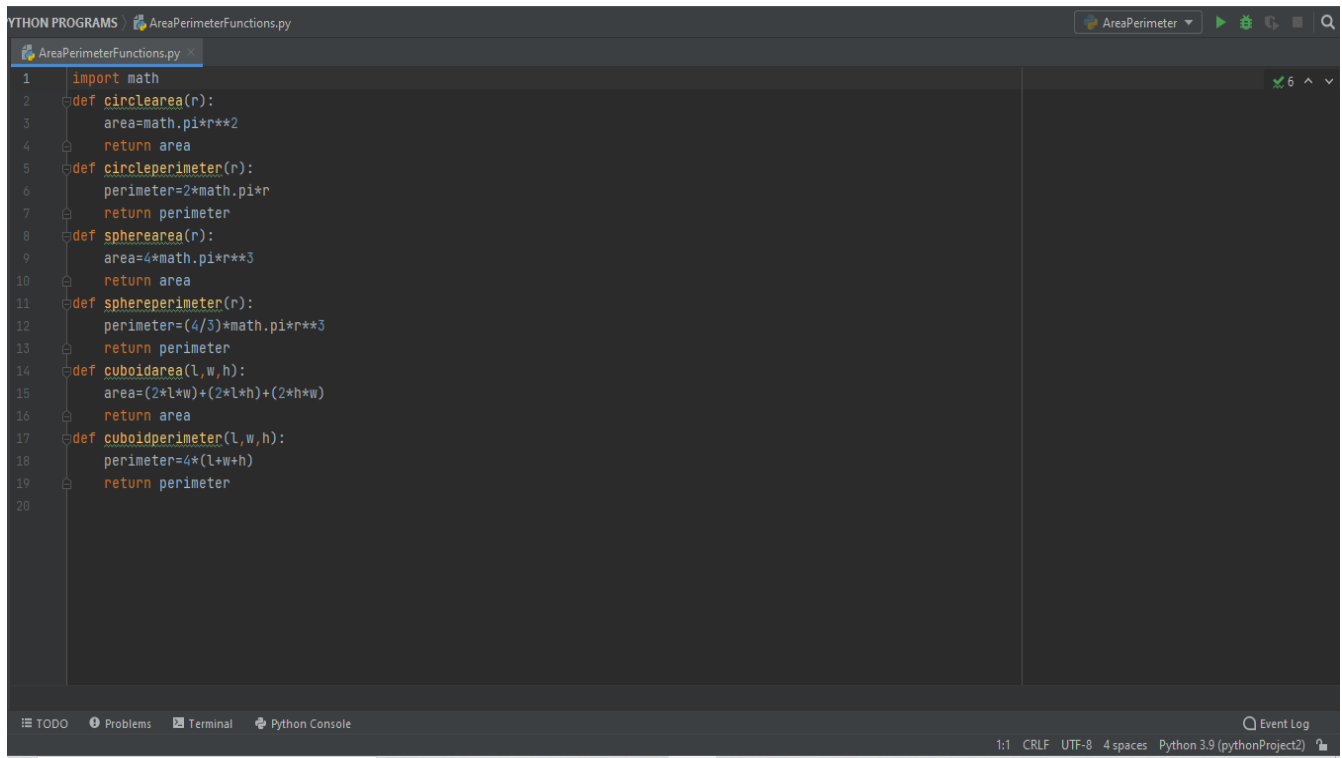
Below the editor is the 'Run' console. It shows the command executed: `"C:\Users\EBIN SABU\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:/PYTHON PROGRAMS/Ordinal value.py"`. The output of the program is:

```
The original list:
['abi', 'jio', 'ram']
The ascii list is:
[97, 98, 105, 106, 105, 111, 114, 97, 109]
```

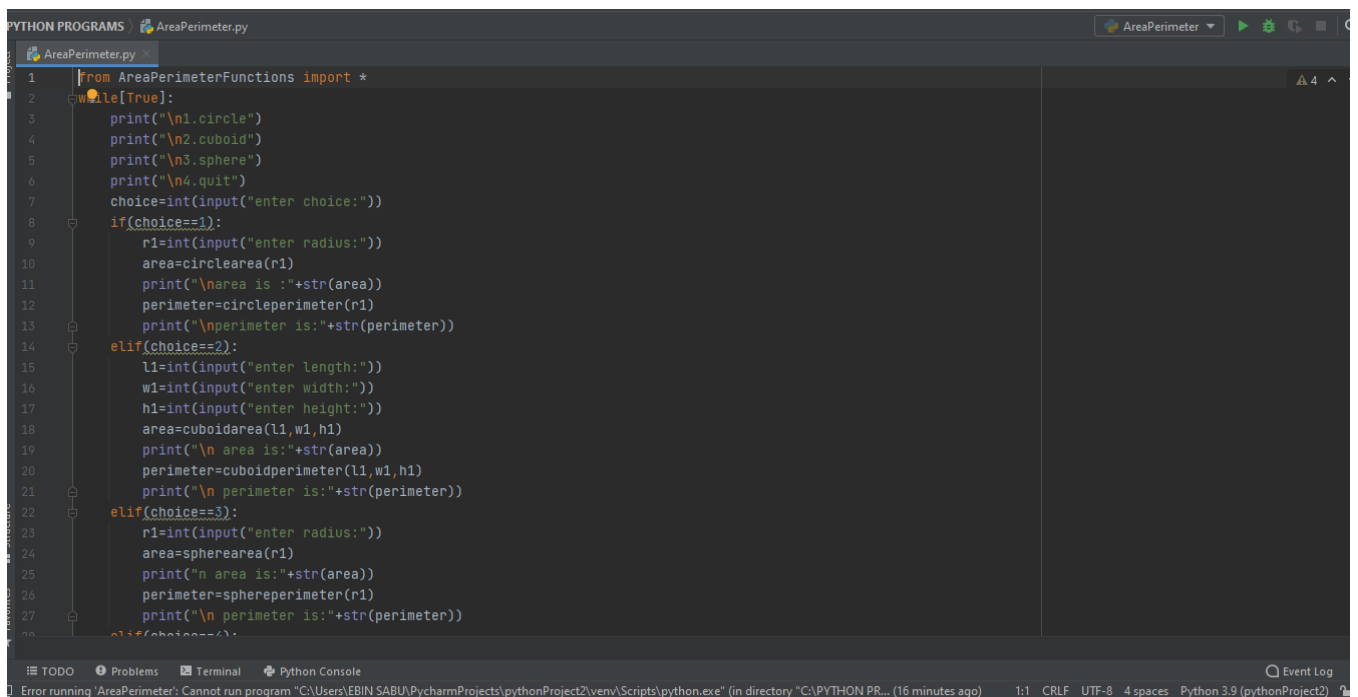
The console also indicates 'Process finished with exit code 0'. At the bottom, a status bar shows the file encoding as UTF-8, line endings as CRLF, and the Python interpreter as Python 3.9 (pythonProject2).

2. Create a Package graphics with module rectangle, circle and sub-package 3D-graphics with modules cuboid and sphere. Include methods to find area and perimeter of respective figure in each module. Write program that finds area and perimeter of figure by different importing statements.

Program



```
1 import math
2 def circlearea(r):
3     area=math.pi*r**2
4     return area
5 def circleperimeter(r):
6     perimeter=2*math.pi*r
7     return perimeter
8 def spherearea(r):
9     area=4*math.pi*r**2
10    return area
11 def sphereperimeter(r):
12    perimeter=(4/3)*math.pi*r**3
13    return perimeter
14 def cuboidarea(l,w,h):
15    area=(2*l*w)+(2*l*h)+(2*w*h)
16    return area
17 def cuboidperimeter(l,w,h):
18    perimeter=4*(l+w+h)
19    return perimeter
20
```



```
1 from AreaPerimeterFunctions import *
2 while True:
3     print("\n1.circle")
4     print("\n2.cuboid")
5     print("\n3.sphere")
6     print("\n4.quit")
7     choice=int(input("enter choice:"))
8     if(choice==1):
9         r1=int(input("enter radius:"))
10        area=circlearea(r1)
11        print("\narea is :"+str(area))
12        perimeter=circleperimeter(r1)
13        print("\nperimeter is:"+str(perimeter))
14    elif(choice==2):
15        l1=int(input("enter length:"))
16        w1=int(input("enter width:"))
17        h1=int(input("enter height:"))
18        area=cuboidarea(l1,w1,h1)
19        print("\n area is:"+str(area))
20        perimeter=cuboidperimeter(l1,w1,h1)
21        print("\n perimeter is:"+str(perimeter))
22    elif(choice==3):
23        r1=int(input("enter radius:"))
24        area=spherearea(r1)
25        print("\n area is:"+str(area))
26        perimeter=sphereperimeter(r1)
27        print("\n perimeter is:"+str(perimeter))
28    elif(choice==4):
29        break
```

```
THON PROGRAMS / AreaPerimeter.py
AreaPerimeter.py x
print("\n==quit==")
choice=int(input("enter choice:"))
if(choice==1):
    r1=int(input("enter radius:"))
    area=circlearea(r1)
    print("\narea is :"+str(area))
    perimeter=circleperimeter(r1)
    print("\nperimeter is:"+str(perimeter))
elif(choice==2):
    l1=int(input("enter length:"))
    w1=int(input("enter width:"))
    h1=int(input("enter height:"))
    area=cuboidarea(l1,w1,h1)
    print("\n area is:"+str(area))
    perimeter=cuboidperimeter(l1,w1,h1)
    print("\n perimeter is:"+str(perimeter))
elif(choice==3):
    r1=int(input("enter radius:"))
    area=spherearea(r1)
    print("\n area is:"+str(area))
    perimeter=sphereperimeter(r1)
    print("\n perimeter is:"+str(perimeter))
elif(choice==4):
    quit(0)
else:
    print("give a valid choice")
32
```

TODO Problems Terminal Python Console Event Log

Error running 'AreaPerimeter': Cannot run program "C:\Users\EBIN SABU\PycharmProjects\pythonProject2\venv\Scripts\python.exe" (in directory "C:\PYTHON P... (16 minutes ago) 32:1 CRLF UTF-8 4 spaces Python 3.9 (pythonProject2)

Output

```
THON PROGRAMS / AreaPerimeter.py
AreaPerimeter.py x
Run: AreaPerimeter x
"C:\Users\EBIN SABU\PycharmProjects\pythonProject\venv\Scripts\python.exe" "C:/PYTHON PROGRAMS/AreaPerimeter.py"
1.circle
2.cuboid
3.sphere
4.quit
enter choice:1
enter radius:4

area is :50.26548245743669

perimeter is:25.132741228718345

1.circle
2.cuboid
3.sphere
4.quit
enter choice:2
enter length:4
enter width:4
enter height:3
```

Run TODO Problems Terminal Python Console Event Log

Error running 'AreaPerimeter': Cannot run program "C:\Users\EBIN SABU\PycharmProjects\pythonProject2\venv\Scripts\python.exe" (in directory "C:\PYTHON PR... (11 minutes ago) 1:1 CRLF UTF-8 4 spaces Python 3.9 (pythonProject2)

```
YTHON PROGRAMS  AreaPerimeter.py
AreaPerimeter.py x
Run: AreaPerimeter x
1.circle
2.cuboid
3.sphere
4.quit
enter choice:2
enter length:4
enter width:3
enter height:2

area is:52

perimeter is:36

1.circle
2.cuboid
3.sphere
4.quit
enter choice:3
enter radius:4
n area is:804.247719318987

Run TODO Problems Terminal Python Console Event Log
```

```
YTHON PROGRAMS  AreaPerimeter.py
AreaPerimeter.py x
Run: AreaPerimeter x
enter height:2
area is:52
perimeter is:36

1.circle
2.cuboid
3.sphere
4.quit
enter choice:3
enter radius:4
n area is:804.247719318987

perimeter is:268.082573106329

1.circle
2.cuboid
3.sphere
4.quit
enter choice:

Error running 'AreaPerimeter': Cannot run program "C:\Users\EBIN\SABU\PycharmProjects\pythonProject2\venv\Scripts\python.exe" (in directory "C:\PYTHON ... (11 minutes ago) 53:15 CRLF UTF-8 4 spaces Python 3.9 (pythonProject2)
```