FEDERAL INSTITUTE OF SCIENCE AND TECHNOLOGY

(FISAT)™

HORMIS NAGAR, MOOKKANNOOR

ANGAMALY-683577

'FOCUS ON EXCELLENCE'

LABORATORY RECORD

20MCA131 - PROGRAMMING LAB

Name: **GOKUL SURESH**

Branch: **MASTER OF COMPUTER APPLICATIONS**

Semester: **1** **Batch: 2021 A** **Roll No: 59**

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University Exam.Reg. No: FIT21MCA-2059

CERTIFICATE

Certified that this is the Bonafide record of the Practical work done by Mr. **GOKUL SURESH (**FIT21MCA-2059) in the **20MCA131-PROGRAMMING** Laboratory of the Federal Institute of Science and Technology during the academic year 2021-2022.

Signature of Staff in Charge — Signature of H.O.D

Name: — Name:

Date:

Date of University practical examination ……

Signature of Internal Examiner — Signature of External Examiner

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COURSE OUTCOME 1

1) Display future leap years from current year to a final year entered by User.

Source code

```
print("print leap year
between two given years");
startyear=2021
endyear=int(input("Enter end year")) print("list of leap years")
for year in
    range(startyear,endyear
    ): if(0==year%4):
        print(year)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
print leap year between two given years
Enter end year 2030
list of leap years
2024
2028
```

2) List comprehensions:

a. Generate positive list of numbers from a given list of integers.

Source code

```
list=[-11,4,8,-34,10,14]
print("Elements in the list are:",list) print("Positive numbers in the list")
for num in list:
    if num>=0:
        print(num)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Elements in the list are: [-11, 4, 8, -34, 10, 14]
Positive numbers in the list
4
8
10
14
```

b. Square of N numbers

Source code

```
n=int(input('Enter range:'))
for num in range(1,n+1):
    num=num*num
    print(num)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter range:5
1
4
9
16
25
```

c. Form a list of vowels selected from a given word.

Source code

```
s=input("Enter a string: ")
list=[]
for i in s:
   if i in "aeiouAEIOU":
            list.append(i)
print("vowels in the list are:")
print(list)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a string: gokul
vowels in the list are:
['o', 'u']
```

d. List ordinal values of each element of a word.

Source code

```
print("String: Welcome")
print("Ordinal Values")
for i in 'W','e','l','c','o','m','e':
   x=ord(i)
   print(x)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
String: Welcome
Ordinal Values
87
101
108
99
111
109
101
```

3) Count the occurrences of each word in a line of text.

Source code

```
list1=[]
list2=[]
x=input("Enter a line of text:")
for i in x.split(" "):
        list1.append(i)
        if i not in list2:
```

```
                    list2.append(i)
    for i in list2:
    print(i,"\t",list1.count(i))
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a line of text:do good and good will come to you
do      1
good    2
and     1
will    1
come    1
to      1
you     1
```

4) Prompt the user for a list of integers. For all values greater than 100, store 'over' instead.

Source code

```
list=[]
while True:
 n=int(input('Enter an integer: '))
 if(n<=100):
        list.append(n)
 else:
        list.append('over')
        print(list)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter an integer: 45
Enter an integer: 15
Enter an integer: 35
Enter an integer: 101
[45, 15, 35, 'over']
Enter an integer:
```

5) Store a list of first names. Count the occurrences of 'a' within the list.

Source code

```
list=['ann','mariya','anju'] print("Elements in the list are:")
print(list)
count=0
for word in list:
        for i in word:
                if i=='a':
                        count+=1
print("count of 'a' is:", count)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Elements in the list are:
['albin', 'ananthu', 'anil']
count of 'a' is: 4
```

6) Enter 2 lists of integers.Check

a. whether list are of same length

b. whetherlist sums of same value

c. whether any value occur in both.

Source code

```
l1=[1,2,3,4]
l2=[1,3,2]
print("List 1",l1)
print("List 2",l2)
x=len(l1)
y=len(l2)
if x==y:
 print("List are of same length")
```

```
else:
 print("Length of lists are different")
s1=0
s2=0
for i in range(x):
 s1=s1+l1[i]
print("Sum of elements of List1:",s1)
for j in range(y):
 s2=s2+l2[j]
print("Sum of elememts of List2:",s2)
if s1==s2:
 print("Sum of list elements is same")
else:
 print("Sum of list elements is not same")
print("Common elements are:")
for i in range(x):
 for j in range(y):
        if l1[i]==l2[j]:
                print(l1[i])
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
List 1 [1, 2, 3, 4]
List 2 [1, 3, 2]
Length of lists are different
Sum of elements of List1: 10
Sum of elememts of List2: 6
Sum of list elements is not same
Common elements are:
1
2
3
```

7) Get a string from an input string where all occurrences of first character replaced with '$',except first character.[eg:onion->oni$n]

Source code

```
str=input("Enter a string: ")
print("Original string is: ",str)
char=str[0]
str=str.replace(char,'$')
str=char+str[1:]
print("String: ",str)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a string: google
Original string is:  google
String:  goo$le
```

8) Create a string from given string where first and last characters exchanged. [eg:python->nythop]

Source code

```
s=input("Enter a string: ")
t=s[0]
t1=s[-1]
n=len(s)
ns=t1+s[1:n-1]+t
print(ns)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a string: gokul
lokug
```

9) Accept the radius from the user and find the area of the circle.

Source code

```
r=int(input('Enter the radius: '))
A=3.14*r*r
print(A)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter the radius: 5
78.5
```

10) Find the biggest of 3 numbers

Source code

```
a=int(input('Enter first number:'))
b=int(input('Enter second number:'))
c=int(input('Enter third number:'))
if a>b and a>c:
 print(a)
if b>a and b>c:
 print(b)
if c>a and c>b:
 print(c)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter first number:5
Enter second number:2
Enter third number:9
9
```

11) Accept a file name from user and print extension of that.

Source code

```
import os
a=input("Enter file name:")
print("The extension of file",a,"is",os.path.splitext(a))
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter file name:gokul.py
The extension of file gokul.py is ('gokul', '.py')
```

12) Create a list of colors from comma-separated color names entered by user. Display first and last colors.

Source code

```
colors=[]
str=(input("Enter color names:"))
for i in str.split(','):
 colors.append(i)
print(colors)
print("first color:",colors[0],"Last color:",colors[-1])
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter color names:red,blue,green,brown
['red', 'blue', 'green', 'brown']
first color: red Last color: brown
```

13) Accept an integer n and compute n+nn+nnn.

Source code

```
n=int(input("Enter the number:"))
a=n*1
b=n*11
c=n*111
s=a+b+c
print(n,"+",n,"*",n,"+",n,"*",n,"*",n,"=",s)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter the number:15
15 + 15 * 15 + 15 * 15 * 15 = 1845
```

14) Print out all color from color-list1 not contained in color-list2

Source code

```
l1=['red','green','blue','yellow','black']
l2=['red','green','yellow']
print(l1)
print(l2)
print("Colors that are not in l1:
")
for i in l1:
 if i not in l2:
        print(i)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
['red', 'green', 'blue', 'yellow', 'black']
['red', 'green', 'yellow']
Colors that are not in l1:
blue
black
```

15) Create a single string separated with space from two strings by swapping the character at position 1.

Source code

```
str1=input("Enter first string:")
str2=input("Enter second string:")
str3=str2[0]+str1[1:]+" "+str1[0]+str2[1:]
print(str3)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter first string:gokul
Enter second string:rahul
rokul gahul
```

16) Merge two dictionaries.

Source code

```
D1={"Name":"Ann mariya","Age":"20"}
print("Directory 1",D1)
D2={"Gender":"Female","Qualification":"BCA"}
print("Directory 2",D2)
D1.update(D2)
print("After merging...")
print(D1)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Directory 1 {'Name': 'Gokul', 'Age': '21'}
Directory 2 {'Gender': 'Male', 'Qualification': 'BCA'}
After merging...
{'Name': 'Gokul', 'Age': '21', 'Gender': 'Male', 'Qualification': 'BCA'}
```

17) Find gcd of 2 numbers

Source code

```
a=int(input("Enter first number: "))
b=int(input("Enter first number: "))
x=min(a,b)
gcd=0
for i in range (1,x+1):
 if((a%x==0) and (b%x==0)):
        gcd=i
print("GCD is",i)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter first number: 10
Enter first number: 21
GCD is 10
```

18) From a list of integers,create a list removing even numbers.

Source code

```
l1=[1,2,3,4,5,6,7,8,9,10]
print(l1)
l2=[]
for i in range(len(l1)):
 if l1[i]%2!=0:
        l2.append(l1[i])
print("List after removing even elements")
print(l2)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
[1, 2, 3, 4, 5, 6, 7, 8, 9, 10]
List after removing even elements
[1, 3, 5, 7, 9]
```

COURSE OUTCOME 2

19) Program to find the factorial of a number.

Source code

```
n=int(input('Enter a number:'))
fact=1
for i in range (1,n+1):
   fact=fact*i
print(fact)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a number:4
1
2
6
24
```

20) Generate fibonacci series of N terms.

Source code

```
n=int(input('Enter a limit:'))
a=0
b=1
print(a)
print(b)
for i in range (2,n):
        c=a+b
        print(c)
        a=b
        b=c
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a limit:5
0
1
1
2
3
```

21) Find the sum of all items in a list.

Source code

```
list=[2,6,9,11,25]
print("List elements are:",list)
sum=0
for i in list:
        sum=sum+i
print("The sum of list elements is:",sum)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
List elements are: [2, 6, 9, 11, 25]
The sum of list elements is: 53
```

22) Generate a list of four digit numbers in a given range with all their digits even and the number is a perfect square.

Source code

```
limit1=1000
limit2=9999
list1=[]
for i in range(limit1,limit2):
```

```
    j=i
    digit=[]
    while(i!=0):
        digit.append(i%10)
        i=int(i/10)
    count=0
    for n in digit:
        if n%2==0:
            count=count+1
        if count==4:
            for k in range(31,100):
                if((k**2)==j):
                    list1.append(j)
                    print(k)
print(list1)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
68
78
80
92
[4624, 6084, 6400, 8464]
```

23) Display the given pyramid with step number accepted from user.

Source code

```
n=int(input("Enter a number:"))
for j in range(0,n+1):
    for i in range(1,j+1):
        i=j*i
        print(i,end=" ")
    print("\n")
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a number:5


1

2 4

3 6 9

4 8 12 16

5 10 15 20 25
```

24) Count the number of characters (character frequency) in a string.

Source code

```
string=input("Enter a string:")
list1=[]
for i in string:
    if i not in list1:
            list1.append(i)
for i in list1:
    count=0
    for j in string:
            if(i==j):
                    count=count+1
    print(i,"\t:",count)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a string:welcome
w       : 1
e       : 2
l       : 1
c       : 1
o       : 1
m       : 1
```

25) Add 'ing' at the end of a given string. If it already ends with 'ing', then add 'ly'.

Source code

```
string=input("Enter a string:")
if(string[-3:]=="ing"):
        string+="ly"
else:
        string+="ing"
print(string)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a string:gokul
gokuling
```

26) Accept a list of words and return length of longest word.

Source code

```
lis=[]
n=int(input("Enter the range:"))
print("Enter the words:")
for i in range(0,n):
        lis.append(input(""))
longest=lis[0]
```

```
for i in range(1,n):
        if(len(lis[i])>len(longest)):
          longest=lis[i]
print("Length of longest word is",len(longest))
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter the range:5
Enter the words:
race
car
laptop
mobile
charger
Length of longest word is 7
```

27) Construct following pattern using nested loop.

```
*
* *
* * *
* * * *
* * * * *

* * * *

* * *
* *
*
```

Source code

```
for i in range(1,6):
   for j in range(1,i+1):
        print("*",end=" ")
   print("\n")
```

```
for i in range(4,0,-1):
    for j in range(1,i+1):
            print("*",end=" ")
    print("\n")
```

Output

28) Generate all factors of a number.

Source code

```
n=int(input("Enter a number:"))
print("Factors are")
for i in range(1,n+1):
    if(n%i==0):
            print(i)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter a number:5
Factors are
1
5
```

COURSE OUTCOME 3

29) 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 figures by different importing statements. (Include selective import of modules and import * statements)

Source code

Graphice\circle.py

```
from math import pi
def area_circle(radius):
    return pi*radius*radius
def perimeter_circle(radius):
    return 2*pi*radius
```

Graphics\rectangle.py

```
def area_rec(length,width):
    return length*width
def perimeter_rec(length,width):
    return 2*(length+width)
```

Graphics\tdgraphics\cuboid.py

```
def area_cuboid(l,b,h):
    return 2*(l*h + b*h + l*b)
def volume_cuboid(l,b,h):
```

```
    return l*b*h
```

Graphics\tdgraphics\sphere.py

```
from math import pi
def area_sphere(radius):
    return 4*(pi*radius*radius)
def perimeter_sphere(radius):
    return 2*pi*radius
```

graphics.py (driver code)

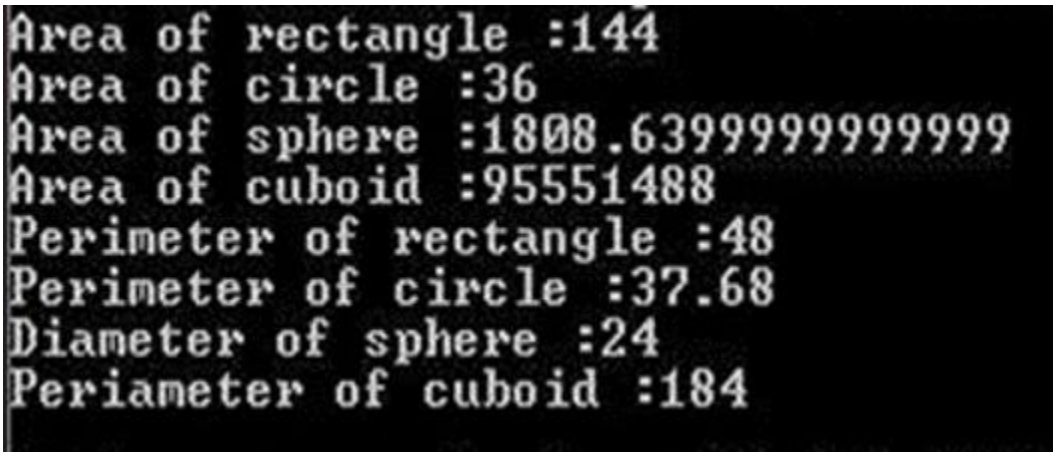
```
import Graphics
from Graphics import circle,rectangle
from Graphics.tdgraphics import cuboid,sphere
from Graphics.circle import *
print("Area of a circle with radius 10 is : ",circle.area_circle(10))
print("Permeter of a circle with radius 10 is ",circle.perimeter_circle(10))
print("\n")

print("Area of a Rectangle with length and width 10 is :
      ",rectangle.area_rec(10,10))
print("Permeter of a Rectangle with length and width 10 is :
      ",rectangle.perimeter_rec(10,10))
print("\n")

print("Area of a  cuboid with length,width,height 10 is :
      ",cuboid.area_cuboid(10,10,10))
print("Volume of a cuboid with length,width,height 10 is :
      ",cuboid.volume_cuboid(10,10,10))
print("\n")

print("Area of a spere with radius 10 is : ",sphere.area_sphere(10))
print("Permeter of a spere with radius 10 is ",sphere.perimeter_sphere(10))
```

Output


Area of rectangle :144
Area of circle :36
Area of sphere :1808.6399999999999
Area of cuboid :95551488
Perimeter of rectangle :48
Perimeter of circle :37.68
Diameter of sphere :24
Periameter of cuboid :184

COURSE OUTCOME 4

30) Create Rectangle class with attributes length and breadth and methods to find area and perimeter. Compare two Rectangle objects by their area.

Source code

```
class Rectangle:
    def __init__(self,length,breadth):
            self.length = length
            self.breadth = breadth
    def area(self):
            return self.length * self.breadth
    def perimeter(self):
            return 2*(self.length + self.breadth)
l=int(input("Enter length of rectangle1: "))
b=int(input("Enter breadth of rectangle1: "))
rect1 = Rectangle(l,b)
a1=rect1.area()
p1=rect1.perimeter()
print("Area:",a1)
print("Perimeter:",p1)
l=int(input("Enter length of rectangle2: "))
b=int(input("Enter breadth of rectangle2: "))
rect2 = Rectangle(l,b)
a2=rect2.area()
p2=rect2.perimeter()
print("Area:",a2)
```

```
print("Perimeter:",p2)
if (a1>a2):
   print("First rectangle is larger")
elif a1==a2:
   print("Rectangles are of same area")
else:
   print("Second rectangle is larger")
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter length of rectangle1: 4
Enter breadth of rectangle1: 6
Area: 24
Perimeter: 20
Enter length of rectangle2: 8
Enter breadth of rectangle2: 10
Area: 80
Perimeter: 36
Second rectangle is larger
```

31) Create a Bank account with members account number, name, type of account and balance. Write constructor and methods to deposit at the bank and withdraw an amount from the bank.

Source code

```
class bank:
def __init__(self,acc_no,name,acc_type,bal):
        self.acc_no=acc_no
        self.name=name
        self.acc_type=acc_type
        self.bal=bal
```

```
    def deposit(self):
            self.bal=self.bal+y
            return self.bal
    def withdraw(self):
            return self.bal-y
    def display_balance(self):
            return self.bal
acc1=bank("b11","Ann","Savings",50000)
while(1):
    print("1.Deposit\n2.Withdraw\n3.Display balance\n4.Exit\n")
    ch=int(input("Enter your choice:"))
    if ch==1:
            amt=int(input("Enter the amount:"))
            b=acc1.deposit(amt)
            print("Current balance:",b)
    elif ch==2:
            amt=int(input("Enter the amount:"))
            b=acc1.withdraw(amt)
            print("Current balance:",b)
    elif ch==3:
            cb=acc1.display_balance()
            print("Current balance:",cb)
    elif ch==4:
```

```
            exit(1)

        else:

            print("Invalid choice")
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:3
Current balance: 50000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:1
Enter the amount:2000
Current balance: 52000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:2
Enter the amount:4000
Current balance: 48000
1.Deposit
2.Withdraw
3.Display balance
4.Exit

Enter your choice:
```

32) Create a class Rectangle with private attributes length and width. Overload '<' operator to compare the area of 2 rectangles.

Source code

```
class Rectangle:
    def __init__(self,length,breadth):

            self.__length = length

            self.__breadth = breadth

    def __lt__ (self,rect2):
```

```
            if self.__length*self.__breadth < rect2.__length*rect2.__breadth:
                return True
            else:
                return False
l=int(input("Enter length of rectangle1: "))
b=int(input("Enter breadth of rectangle1: "))
rect1 = Rectangle(l,b)
l=int(input("Enter length of rectangle2: "))
b=int(input("Enter breadth of rectangle2: "))
rect2 = Rectangle(l,b)
if rect1 < rect2:
   print("Second rectangle is larger")
else:
   print("First rectangle is larger")
```

output

```
C:\Users\gokul\Desktop>python3 positive.py
Enter length of rectangle1: 32
Enter breadth of rectangle1: 45
Enter length of rectangle2: 23
Enter breadth of rectangle2: 56
First rectangle is larger
```

33) Create a class Time with private attributes hour, minute and second. Overload '+' operator to find sum of 2 time.

Source code

```
class Time:
    def __init__(self,h,m,s):
        self.__hour=h
        self.__minute=m
        self.__second=s
    def __add__(self,ob):
        hour=self.__hour+ob.__hour
        minute=self.__minute+ob.__minute
        second=self.__second+ob.__second
        t=Time(hour,minute,second)
        return t

    def print_it(self):
        print("Hour :",self.__hour)
        print("Minute :",self.__minute)
        print("Second :",self.__second)

t1=Time(10,10,10)
t2=Time(20,20,20)
t3=t1+t2
t3.print_it()
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Hour : 30
Minute : 30
Second : 30
```

34) Create a class Publisher (name). Derive class Book from Publisher with attributes title and author. Derive class Python from Book with attributes price and no_of_pages. Write a program that displays information about a Python book. Use base class constructor invocation and method overriding.

Source code

```
class Publisher(object):
    def __init__(self,name):
        self.name=name
    def display1(self):
        print(self.title)
        print(self.author)
        class Book(Publisher):
    def __init__(self,name,title,author):
        super().__init__(name)
        self.title=title
        self.author=author
    def display2(self):
        #super().display1()
        print(self.title)
        print(self.author)
class Python(Book):
    def __init__(self,name,title,author,price,no_of_pages):
        super().__init__(name,title,author)
        self.price=price
        self.no_of_pages=no_of_pages
    def display3(self):
        super().display2()
        print(self.price)
        print(self.no_of_pages)
p=Python("ABC Publications","Gaming Python","Gokul",100,500)
p.display3()
q=Python("XYZ Publications","Java programming","E
Balagurusami",500,1200)
q.display3()
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
Gaming Python
Gokul
100
500
Java programming
beluga
500
1200
```

COURSE OUTCOME 5

35) Write a Python program to read a file line by line and store it into a list.

Source code

```
fp=open("text_file.txt",'r')
lines=[]
for line in fp:
        lines.append(line.strip())
print(lines)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
['Tamil Nadu, a South Indian state, is famed for its Dravidian-style Hindu temples. In Madurai, Meenakshi Amma
n Temple has high â€˜gopuramâ€™ towers ornamented with colourful figures. On Pamban Island, Ramanathaswamy Tem
ple is a pilgrimage site. The town of Kanyakumari, at Indiaâ€™s southernmost tip, is the site of ritual sunris
es. Capital Chennai is known for beaches and landmarks including 1644 colonial Fort St. George']
```

36) Write a Python program to read each row from a given csv file and print a list of strings.

Source code

```
import csv

with open('people.csv', 'r') as file:

    reader = csv.reader(file)
    for row in reader:
        print(row)
```

Output

```
C:\Users\gokul\Desktop>python3 positive.py
['1', 'Eldon Base for stackable storage shelf, platinum', 'Muhammed MacIntyre', '3', '-213.25', '38.94', '35', 'Nunavut', 'Storage & Organization', '0.8
['2', '1.7 Cubic Foot Compact "Cube" Office Refrigerators', 'Barry French', '293', '457.81', '208.16', '68.02', 'Nunavut', 'Appliances', '0.58']
['3', 'Cardinal Slant-D® Ring Binder, Heavy Gauge Vinyl', 'Barry French', '293', '46.71', '8.69', '2.99', 'Nunavut', 'Binders and Binder Accessories', '
]
['4', 'R380', 'Clay Rozendal', '483', '1198.97', '195.99', '3.99', 'Nunavut', 'Telephones and Communication', '0.58']
['5', 'Holmes HEPA Air Purifier', 'Carlos Soltero', '515', '30.94', '21.78', '5.94', 'Nunavut', 'Appliances', '0.5']
['6', 'G.E. Longer-Life Indoor Recessed Floodlight Bulbs', 'Carlos Soltero', '515', '4.43', '6.64', '4.95', 'Nunavut', 'Office Furnishings', '0.37']
['7', 'Angle-D Binders with Locking Rings, Label Holders', 'Carl Jackson', '613', '-54.04', '7.3', '7.72', 'Nunavut', 'Binders and Binder Accessories',
']
['8', 'SAFCO Mobile Desk Side File, Wire Frame', 'Carl Jackson', '613', '127.70', '42.76', '6.22', 'Nunavut', 'Storage & Organization', '']
['9', 'SAFCO Commercial Wire Shelving, Black', 'Monica Federle', '643', '-695.26', '138.14', '35', 'Nunavut', 'Storage & Organization', '']
['10', 'Xerox 198', 'Dorothy Badders', '678', '-226.36', '4.98', '8.33', 'Nunavut', 'Paper', '0.38']
```