

Rollwala Computer Center

# **INTRODUCTION TO PYTHON PROGRAMMING**

## **Assignment-4**

Feb 20, 2022



Name: **Akshit Trivedi**

Roll No: **40**

Course: **Master of Computer Application**

Sem: **1<sup>ST</sup>**

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

**1 Write a program to create a file and input five person full name in file and read the information from file.**

### **INPUT:**

'''1. Write a program to create a file and input five person full name in file and read the information from file.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

```
'''  
try:  
    with open("1_person_name.txt", "w") as f:  
        for i in range(5):  
            name = input("Enter the name: ")  
            f.write(name + "\n")  
  
    print("Names are: ")  
    with open("1_person_name.txt", "r") as file:  
  
        for fline in file:  
            print(fline.rstrip("\n"))  
            print()  
  
except FileNotFoundError:  
    print("File not found!!!")  
  
except Exception as e:  
    print("Exception occurred: ",e)
```

### **OUTPUT:**

Enter the name: Akshit Trivedi

Enter the name: Sijo Jose

Enter the name: Sagar Mer



## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

Enter the name: Yash Thanki

Enter the name: Dev Sharma

Names are:

Akshit Trivedi

Sijo Jose

Sagar Mer

Yash Thanki

Dev Sharma

**2 Write a program to search a word in to the file. If word is found count number of occurrence and print total no of occurrence for that word.**

### **INPUT:**

'''2. Write a program to search a word in to the file. If word is found count number of occurrence and print total no of occurrence for that word.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

...

```
f=open("2_word_countv.txt","r")  
word=input("Enter the word to match: ")  
count=0
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
for file1 in f:
    w1=file1.split(" ")
    for w in w1:
        if(w.rstrip("\n")==word):
            count+=1

print("Total No of time", word, "occurred in file:", count)
```

### **OUTPUT:**

Enter the word to match: is  
Total No of time is occurred in file: 2

**3 Write a program store each word from file and count how many time a particular word is in the file.**

### **INPUT:**

'''3 Write a program store each word from file and count how many time a particular word is in the file.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

```
...
try:
    namedict = dict()

    with open("2_word_count.txt", "r") as f:
        for fileline in f:
            words = fileline.split(" ")
            for w in words:
                w = w.rstrip("\n")
                if w in namedict:
                    namedict[w] = namedict[w] + 1
                else:
                    namedict[w] = 1

    for word, count in namedict.items():
        print(word, ":", count)
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
except FileNotFoundError:  
    print("File not found!!!")  
  
except Exception as e:  
    print("Exception occurred: ",e)
```

### **OUTPUT:**

```
My:1  
name:1  
is:2  
Akshit:1  
Trivedi.:1  
I:1  
am:1  
a:1  
student:1  
of:1  
MCA.:1  
This:1  
Python.:1
```

**4 Write a program count no of lines, word and character in a file.**

### **INPUT:**

```
'''4. Write a program count no of lines, word and character in a file.
```

```
Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4
```

```
'''
```

```
try:  
    with open("2_word_count.txt","r") as f:  
        lines=0  
        space=0  
        char=0  
        for line in f:
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
lines += 1
for c in line:
    char += 1
    if c == " " or c=="\n" :
        space += 1

print("Line Count:",lines)
print("Word Count:",space+1)
print("Character count:",char)

except FileNotFoundError:
    print("File not found!!!")

except Exception as e:
    print("Exception occurred: ",e)
```

### **OUTPUT:**

Line Count: 1  
Word Count: 14  
Character count: 65

**5 Write a program fetch the binary information from the file and convert it in to the string so that you can perform all the operation of string on that information.**

### **INPUT:**

'''5. Write a program fetch the binary information from the file and convert it in to the string so that you can perform all the operation of string on that information.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

...

```
try:
    with open("q5file.dat","rb") as f:
        str = f.read().decode()
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
        print(str)
except FileNotFoundError:
    print("File not found!!!")

except Exception as e:
    print("Exception occurred: ",e)
```

### **OUTPUT:**

My name is Akshit Trivedi  
Python Programming

**6 Write a program to insert a student record in to the file with 5 subject marks. Read student info from file and print the appropriate marksheet like: ID Name SUB1Marks SUB1Marks.....Total Percentage Class.**

### **INPUT:**

'''6. Write a program to insert a student record in to the file with 5 subject marks. Read student info from file and print the appropriate marksheet like: ID Name SUB1Marks SUB1Marks.....Total Percentage Class.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4  
'''

```
import pickle, sys
```

```
class Student:
    def __init__(self):
        pass

    def setDetails(self):
        self.roll = int(input("Enter Roll No: "))
        self.name = input("Enter your name: ")
        self.m1 = int(input("Enter Marks1: "))
        self.m2 = int(input("Enter Marks2: "))
        self.m3 = int(input("Enter Marks3: "))
        self.m4 = int(input("Enter Marks4: "))
```

## PYTHON ASSIGNMENT-4

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
self.m5 = int(input("Enter Marks5: "))
self.tot = self.m1 + self.m2 + self.m3 + self.m4 + self.m5
self.per = (self.tot * 100)/500

def display(self):
    print("\t\t\t\t\tMarksheet")
    print("Roll: ", self.roll)
    print("Name: ", self.name)
    print("m1: ", self.m1)
    print("m2: ", self.m2)
    print("m3: ", self.m3)
    print("m4: ", self.m4)
    print("m5: ", self.m5)
    print("Total Marks: ", self.tot)
    print("Percentage: ", self.per)

try:

    noofrec = int(input("Enter the number of records: "))
    with open("q6.dat", "wb") as f:
        for i in range(noofrec):
            print()
            s = Student()
            s.setDetails()
            pickle.dump(s,f)

    with open("q6.dat","rb") as f:
        for i in range(noofrec):
            obj=pickle.load(f)
            obj.display()
            print()

except FileNotFoundError:
    print("File not found!!!")

except Exception as e:
    print("Exception occurred: ",e)
```



## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

### **OUTPUT:**

Enter the number of records: 3

Enter Roll No: 40

Enter your name: Akshit

Enter Marks1: 98

Enter Marks2: 95

Enter Marks3: 96

Enter Marks4: 97

Enter Marks5: 94

Enter Roll No: 16

Enter your name: Sijo

Enter Marks1: 99

Enter Marks2: 96

Enter Marks3: 93

Enter Marks4: 92

Enter Marks5: 97

Enter Roll No: 21

Enter your name: Sagar

Enter Marks1: 97

Enter Marks2: 95



## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

Enter Marks3: 96

Enter Marks4: 90

Enter Marks5: 99

Marksheet

Roll: 40  
Name: Akshit  
m1: 98  
m2: 95  
m3: 96  
m4: 97  
m5: 94  
Total Marks: 480  
Percentage: 96.0

Marksheet

Roll: 16  
Name: Sijo  
m1: 99  
m2: 96  
m3: 93  
m4: 92  
m5: 97  
Total Marks: 477  
Percentage: 95.4

Marksheet

Roll: 21  
Name: Sagar  
m1: 97  
m2: 95  
m3: 96  
m4: 90  
m5: 99  
Total Marks: 477  
Percentage: 95.4

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

**7 Write a program to insert employee record and read the data. Display the current position in file while reading the data.**

### **INPUT:**

'''7 Write a program to insert employee record and read the data. Display the current position in file while reading the data.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

```
...
import pickle

class Employee:
    def __init__(self):
        pass

    def setDetails(self):
        self.id = int(input("Enter id: "))
        self.name = input("Enter name: ")

    def showDetails(self):
        print("\n\t\t\t\t\tEmployee Details")
        print("Id: ", self.id)
        print("Name: ", self.name)

try:

    noofrec = int(input("Enter the number of records: "))
    with open("q6.dat", "wb") as f:
        for i in range(noofrec):
            print()
            s = Employee()
            s.setDetails()
            pickle.dump(s,f)

    with open("q6.dat","rb") as f:
        for i in range(noofrec):
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
        obj=pickle.load(f)
        obj.showDetails()
        print("Current position: ", f.tell())
        print()

except FileNotFoundError:
    print("File not found!!!")

except Exception as e:
    print("Exception occurred: ",e)
```

### **OUTPUT:**

Enter the number of records: 4

Enter id: 40

Enter name: Akshit

Enter id: 16

Enter name: Sijo

Enter id: 21

Enter name: Sagar

Enter id: 45

Enter name: Yash

#### Employee Details

Id: 40

Name: Akshit

Current position: 69

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

### Employee Details

Id: 16  
Name: Sijo  
Current position: 136

### Employee Details

Id: 21  
Name: Sagar  
Current position: 204

### Employee Details

Id: 45  
Name: Yash  
Current position: 271

**8 Write a program to insert employee record and read the data from 3rd record.**

### **INPUT:**

'''8. Write a program to insert employee record and read the data from 3rd record.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4

...

import pickle

```
class Employee:
    def __init__(self):
        pass

    def setDetails(self):
        self.id = int(input("Enter id: "))
        self.name = input("Enter name: ")
```

## PYTHON ASSIGNMENT-4

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
def showDetails(self):
    print("\n\t\t\t\t\tEmployee Details")
    print("Id: ", self.id)
    print("Name: ", self.name)

try:
    noofrec = int(input("Enter the number of records: "))
    with open("q6.dat", "wb") as f:
        for i in range(noofrec):
            print()
            s = Employee()
            s.setDetails()
            pickle.dump(s,f)
            if(i==1):
                point = int(f.tell())

    with open("q6.dat","rb") as f:
        for i in range(0, 2):
            obj=pickle.load(f)

        for i in range(2, noofrec):
            obj=pickle.load(f)
            obj.showDetails()
            print()

except FileNotFoundError:
    print("File not found!!!")

except Exception as e:
    print("Exception occurred: ",e)
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

### **OUTPUT:**

Enter the number of records: 3

Enter id: 16

Enter name: Sijo

Enter id: 21

Enter name: Sagar

Enter id: 40

Enter name: Akshit

### Employee Details

Id: 40

Name: Akshit

**9 In program no 6 display information from file in descending order of percentage.**

### **INPUT:**

'''9. In program no 6 display information from file in descending order of percentage.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4  
'''

```
import pickle
```

```
class Student:  
    def __init__(self):  
        pass
```

## PYTHON ASSIGNMENT-4

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
def setDetails(self):
    self.roll = int(input("Enter Roll No: "))
    self.name = input("Enter your name: ")
    self.m1 = int(input("Enter Marks1: "))
    self.m2 = int(input("Enter Marks2: "))
    self.m3 = int(input("Enter Marks3: "))
    self.m4 = int(input("Enter Marks4: "))
    self.m5 = int(input("Enter Marks5: "))
    self.tot = self.m1 + self.m2 + self.m3 + self.m4 + self.m5
    self.per = (self.tot * 100)/500
```

```
def display(self):
    print("\t\t\t\t\tMarksheet")
    print("Roll: ", self.roll)
    print("Name: ", self.name)
    print("m1: ", self.m1)
    print("m2: ", self.m2)
    print("m3: ", self.m3)
    print("m4: ", self.m4)
    print("m5: ", self.m5)
    print("Total Marks: ", self.tot)
    print("Percentage: ", self.per)
```

try:

```
noofrec = int(input("Enter the number of records: "))
with open("q6.dat", "wb") as f:
    for i in range(noofrec):
        print()
        s = Student()
        s.setDetails()
        pickle.dump(s,f)

with open("q6.dat","rb") as f:
    for i in range(noofrec):
        obj=pickle.load(f)
        obj.display()
        print()
```

```
except FileNotFoundError:
    print("File not found!!!")
```



## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
except Exception as e:  
    print("Exception occurred: ",e)
```

### **OUTPUT:**

Enter the number of records: 2

Enter Roll No: 40

Enter your name: Akshit

Enter Marks1: 98

Enter Marks2: 6

Enter Marks3: 90

Enter Marks4: 96

Enter Marks5: 91

Enter Roll No: 16

Enter your name: Sijo

Enter Marks1: 98

Enter Marks2: 91

Enter Marks3: 93

Enter Marks4: 92

Enter Marks5: 99

Marksheet

Roll: 40

Name: Akshit

m1: 98

m2: 6

m3: 90

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

m4: 96  
m5: 91  
Total Marks: 381  
Percentage: 76.2

### Marksheet

Roll: 16  
Name: Sijo  
m1: 98  
m2: 91  
m3: 93  
m4: 92  
m5: 99  
Total Marks: 473  
Percentage: 94.6

**10 Write a program to display all the line starting with the word entered by user from the file.**

### **INPUT:**

'''

10. Write a program to display all the line starting with the word entered by user from the file.

Name : Akshit Trivedi  
Roll No.: 40  
Class : MCA sem-1  
Practical Assignment 4  
'''

```
try:
    fname = input("Enter file name: ")
    word = input("Enter word to be searched: ")
    f = open(fname)
    for line in f:
        if line.startswith(word):
            print(line)
    f.close()

except FileNotFoundError:
    print("File not found!!!")
```

## **PYTHON ASSIGNMENT-4**

**Roll No: 40**  
**Class: MCA-1**

**Name: Akshit Trivedi**  
**Year: 2021-22**

```
except Exception as e:  
    print("Exception occurred: ",e)
```

### **OUTPUT:**

Enter file name: 1\_person\_name.txt

Enter word to be searched: Akshit  
Akshit Trivedi