Python Lab Exam -1

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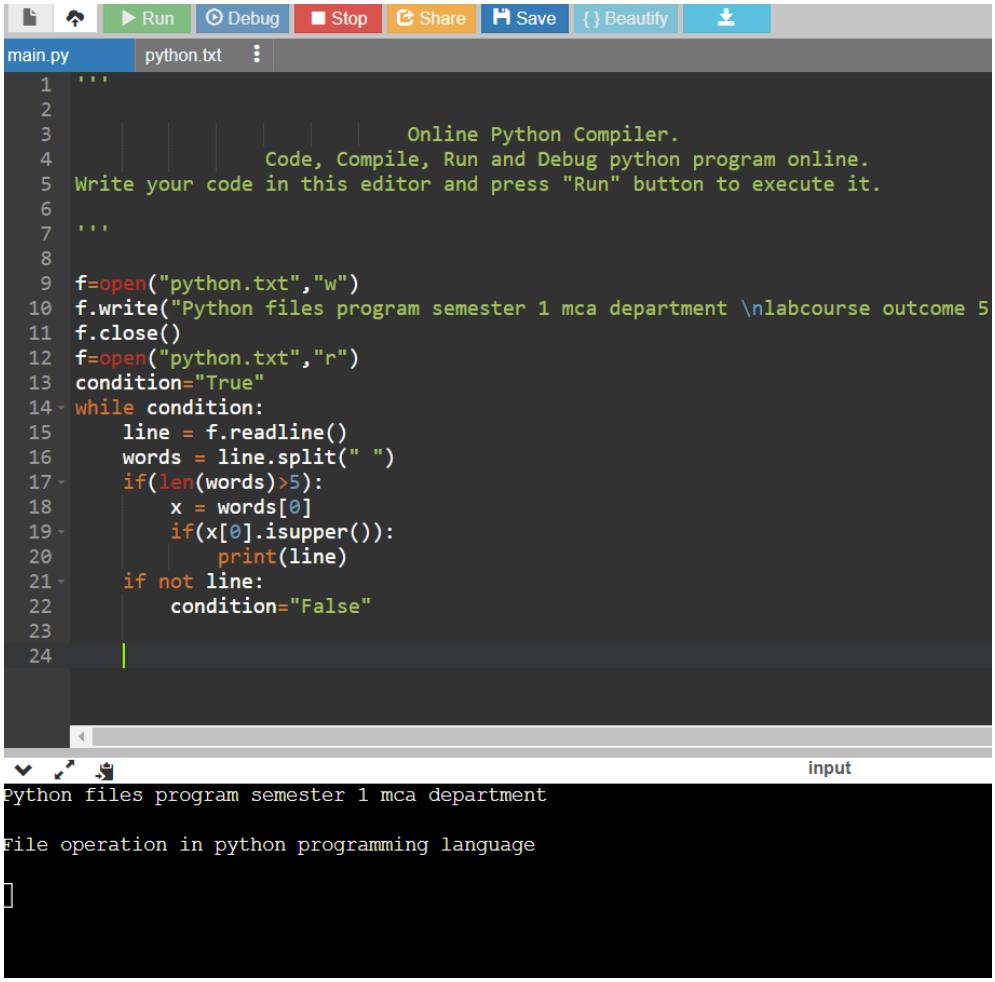
MCA Sem 1

Q. Write a program to read a file and display the lines starting with capital letter and word count greater than 5.

Program code:

```
f=open("python.txt","w")
f.write("Python files program semester 1 mca department \nlabcourse outcome 5 for series examination\nFile operation in python programming language\nprogram no 2 in co5")
f.close()
f=open("python.txt","r")
condition="True"
while condition:
    line = f.readline()
    words = line.split(" ")
    if(len(words)>5):
        x = words[0]
        if(x[0].isupper()):
            print(line)
    if not line:
        condition="False"
```

Output:


Run
Debug
Stop
Share
Save
{ } Beautify
main.py
python.txt
'''
Online Python Compiler.
Code, Compile, Run and Debug python program online.
Write your code in this editor and press "Run" button to execute it.
'''
f=open("python.txt","w")
f.write("Python files program semester 1 mca department \nlabcourse outcome 5
f.close()
f=open("python.txt","r")
condition="True"
while condition:
line = f.readline()
words = line.split(" ")
if(len(words)>5):
x = words[0]
if(x[0].isupper()):
print(line)
if not line:
condition="False"
input
Python files program semester 1 mca department
File operation in python programming language

Q Write a Python program to create a CSV file to store names of 10 students and their marks in four subjects. Find the percentage of each student and display the details. Also display the class average of each subject.

Program Code:

```
import csv
summfc=0
sumds=0
sumdc=0
sumase=0
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("Name MFC DC DS ASE")
    print("--------------------")
    for row in csvreader:
        print(row['Name'],row['MFC'],row['DC'],row['DS'],row['ASE'])
print("--------------------")
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("Name Percentage")
    print("--------------------")
    for row in csvreader:
      percentage=(int(row['MFC'])+int(row['DC'])+int(row['DS'])+int(r
ow['ASE'])/400)*100
        print(row['Name'],percentage)
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("--------------------")
    print("Average Marks for each subject")
    print("--------------------")
    for row in csvreader:
        summfc=summfc+int(row['MFC'])
        sumdc=sumdc+int(row['DC'])
        sumds=sumds+int(row['DS'])
        sumase=sumase+int(row['ASE'])
    print("MFC",summfc/10)
    print("DC",sumdc/10)
    print("DS",sumds/10)
    print("ASE",sumase/10)
```

Output:

csvq.py - E:/python/csvq.py (3.10.0)

File Edit Format Run Options Window Help

```
import csv
summfc=0
sumds=0
sumdc=0
sumase=0
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("Name MFC DC DS ASE")
    print("--------------------")
    for row in csvreader:
        print(row['Name'],row['MFC'],row['DC'],row['DS'],row['ASE'])
print("--------------------")
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("Name Percentage")
    print("--------------------")
    for row in csvreader:
        percentage=(int(row['MFC'])+int(row['DC'])+int(row['DS'])+int(row['ASE'])/400)*100
        print(row['Name'],percentage)
with open("student.csv","r")as csvfile:
    csvreader=csv.DictReader(csvfile)
    print("--------------------")
    print("Average Marks for each subject")
    print("--------------------")
    for row in csvreader:
        summfc=summfc+int(row['MFC'])
        sumdc=sumdc+int(row['DC'])
        sumds=sumds+int(row['DS'])
        sumase=sumase+int(row['ASE'])
    print("MFC",summfc/10)
    print("DC",sumdc/10)
    print("DS",sumds/10)
    print("ASE",sumase/10)
```

IDLE Shell 3.10.0

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```
--------------------
Average Class Marks
--------------------
MFC 44.4
DC 61.1
DS 51.0
ASE 59.5
>>>
========================== RESTART: E:
Name MFC DC DS ASE
--------------------
ajay 50 60 70 80
aman 78 67 88 90
rithu 40 56 66 70
akhil 20 40 39 77
amu 12 77 88 66
binu 89 90 60 77
anna 55 66 44 34
cathy 45 77 32 86
dina 55 78 23 15
--------------------
Name Percentage
--------------------
ajay 18020.0
aman 23322.5
rithu 16217.500000000002
akhil 9919.25
amu 17716.5
binu 23919.25
anna 16508.5
cathy 15421.5
dina 15603.75
--------------------
Average Marks for each subject
--------------------
MFC 44.4
DC 61.1
DS 51.0
ASE 59.5
>>>
```