

Lab 22

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CO1: To write, test, and debug simple Python programs

CO2: To implement Python programs with conditional, loops and functions

Task 1:- Writing in Files Using Python

Python Code:

```
import _mysql_connector
import os as o
f = open('92200133030.txt', 'w')
f.write('1) Programming With Python\n')
f.write('2) Computer Organization And Architecture\n')
f.write('3) Introduction To Communication Enginnering\n')
f.write('4) Discrete Mathematics and Graph Theory\n')
f.write('5) Signals and Systems\n')
f.write('6) Data Structures Using C++\n')
f.close()
```

Output:



92200133030 - Notepad

File Edit Format View Help

```
1) Programming With Python
2) Computer Organization And Architecture
3) Introduction To Communication Enginnering
4) Discrete Mathematics and Graph Theory
5) Signals and Systems
6) Data Structures Using C++
```

Task 2:- Appending Text In A Text file in Python

Python Code:

```
import _mysql_connector
import os as o
f = open('92200133030.txt', 'a')
f.write('7) Stock Market For Beginners\n')
```

f.close()

Output:

- 1) Programming With Python
- 2) Computer Organization And Architecture
- 3) Introduction To Communication Engineering
- 4) Discrete Mathematics and Graph Theory
- 5) Signals and Systems
- 6) Data Structures Using C++
- 7) Stock Market For Beginners

Task 3:- Reading the files using python

Python Code:

```
import _mysql_connector
import os as o
f = open('92200133030.txt', 'r')
print(f.readline()) # Read First Line
print(f.readlines()) # Read All Next Lines
print(f.read()) # Read Entire File
```

Output:

```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull Data/Semester - 3/Programming With Python/Lab Manual/Lab -22/30-10-2023 LAB 22.py"
["1) Programming With Python\n", "2) Computer Organization And Architecture\n", "3) Introduction To Communication Engineering\n", "4) Discrete Mathematics and Graph Theory\n", "5) Signals and Systems\n", "6) Data Structures Using C++\n", "7) Stock Market For Beginners\n", "7) Stock Market For Beginners\n"]
PS C:\Users\abc>
```

Task 4:- Exception Handling in File

Python Code:

```
import _mysql_connector
import os as o
try:
    f = open('92200133030.txt', 'r')
    print(f.read())
finally:
    f.close()
```

Output:

```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull Data/Semester
"
1) Programming With Python
2) Computer Organization And Architecture
3) Introduction To Communication Enginnering
4) Discrete Mathematics and Graph Theory
5) Signals and Systems
6) Data Structures Using C++
7) Stock Market For Beginners
7) Stock Market For Beginners
```

Task 5:- Processing (With Statement Is Equivalent to the try-finally Statement)**Python Code:**

```
import _mysql_connector
import os as o
with open('92200133030.txt', 'r') as f:
    for line in f:
        line = line.strip()
        print(line)
```

Output:

```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull
"
1) Programming With Python
2) Computer Organization And Architecture
3) Introduction To Communication Enginnering
4) Discrete Mathematics and Graph Theory
5) Signals and Systems
6) Data Structures Using C++
7) Stock Market For Beginners
7) Stock Market For Beginners
PS C:\Users\abc>
```

Task 6:- Deleting File**Python Code:**

```
import _mysql_connector
import os as o
o.remove('92200133030.txt')
```

Output:

```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull
"
PS C:\Users\abc>
```

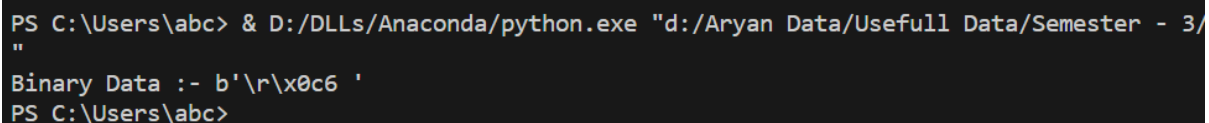
Post Lab

Task 1:- Write a python code for create a binary file and read operations.

Python Code:

```
import _mysql_connector
import os as o
# Crating Binary File
with open('Binary File.bin', 'wb') as file:
    Binary_Data = bytes([13, 12, 54, 32])
    file.write(Binary_Data)
# Read Binary File
with open('Binary File.bin', 'rb') as file:
    data = file.read()
    print(f"Binary Data :- {data}")
```

Output:



```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull Data/Semester - 3/
"
Binary Data :- b'\r\x0c6 '
PS C:\Users\abc>
```

Task 2:- Write a statement in Python to perform the following operations

1. To open a binary file “LOG.DAT” in read mode
2. To open a binary file“LOG.DAT” in write mode

Write a python code for following functions

readable()

writable()

writelines()

Python Code:

```
import _mysql_connector
import os as o
try:
    with open("LOG.DAT", "wb") as file:
        print("File opened in write mode.")
        if file.writable():
            print("The file is writable.")
        else:
            print("The file is not writable.")
except PermissionError:
    print("Permission denied.")
try:
    with open("LOG.DAT", "rb") as file:
        print("File opened in read mode.")
        if file.readable():
            print("The file is readable.")
        else:
            print("The file is not readable.")
```

```
except FileNotFoundError:
    print("File not found.")
with open("output.txt", "w") as file:
    lines = ["Line 1\n", "Line 2\n", "Line 3\n"]
    file.writelines(lines)
```

Output:

```
PS D:\Aryan Data\Usefull Data\Semester - 3\Programming With Python\Lab Manual\Lab -21>
ta\Usefull Data\Semester - 3\Programming With Python\Lab Manual\Lab -21\23-10-2023 LAB-
Buddy says Woof!
Whiskers says Meow!
```

Task 3:- Write a python code to copy the content of one file into other**Python Code:**

```
import _mysql_connector
import os as o
f = open('92200133030.txt', 'w')
f.write('1) Programming With Python\n')
f.write('2) Computer Organization And Architecture\n')
f.write('3) Introduction To Communication Enginnering\n')
f.write('4) Discrete Mathematics and Graph Theory\n')
f.write('5) Signals and Systems\n')
f.write('6) Data Structures Using C++\n')
f.write('7) Stock Market For Beginners\n')
g = open('92200133030(1).txt', 'w')
data = f.read()
g.write(data)
print(g.read())
f.close()
g.close()
```

Output:

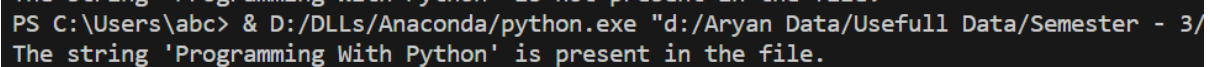
```
PS D:\Aryan Data\Usefull Data\Semester - 3\Programming With Python\Lab Manual\Lab -21>
ta\Usefull Data\Semester - 3\Programming With Python\Lab Manual\Lab -21\23-10-2023 LAB-
Employee Name: John Doe
Employee Salary: 50000
Updated Employee Name: Jane Doe
Updated Employee Salary: 55000
```

Task 4:- Write a python code to check whether the particular string is present in file or not.**Python Code:**

```
def is_string_present_in_file(file_path, search_string):
    try:
        with open(file_path, 'r') as file:
            file_contents = file.read()
            if search_string in file_contents:
```

```
        return True
    else:

return False
except FileNotFoundError:
    print("File not found")
except Exception as e:
    print("An error occurred:", str(e))
return False
file_path = '92200133030.txt'
search_string = 'Programming With Python'
if is_string_present_in_file(file_path, search_string):
    print(f"The string '{search_string}' is present in the file.")
else:
    print(f"The string '{search_string}' is not present in the file.")
```

Output:

```
PS C:\Users\abc> & D:/DLLs/Anaconda/python.exe "d:/Aryan Data/Usefull Data/Semester - 3/
The string 'Programming With Python' is present in the file.
```