LAB CYCLE-7

Program 1

Aim:

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

Source Code:

Samplefile.txt

Hello World !

This is Python Programming.

File Handling in Python.

Regular Expressions in python.

Pg1.py

```
file_name = "Samplefile.txt"
with open(file_name, 'r') as file:
    lines_list = [line.strip() for line in file]
print("Lines stored in the list:")
print(lines_list)
```

Output:

```
Lines stored in the list:
['Hello World !', 'This is Python Programming.', 'File Handling in Python.', 'Regular Expressions in python.']
>>>
```

Program 2

Aim:

Python program to copy odd lines of one file to other.

Source Code:

Samplefile.txt

Hello World !

This is Python Programming.

File Handling in Python.

Regular Expressions in python.

Pg2.py

```
source_file = "Samplefile.txt"
target_file = "odd_file.txt"
with open(source_file, 'r') as source, open(target_file, 'w') as target:
    for line_number, line in enumerate(source, start=1):
        if line_number % 2 != 0:  # Check if the line number is odd
            target.write(line)  # Write the odd line to the target file
print(f"Odd lines have been copied from {source_file} to {target_file}.")
```

Output:

```
Odd lines have been copied from Samplefile.txt to odd_file.txt.
>>>
```

Odd_file.txt

Hello World !

File Handling in Python.

Program 3

Aim:

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

Source Code:

Details.csv

```
Name,Age,District
Arun,20,Thrissur
Aravind,21,Kollam
Shamil,20,Malappuram
```

Pg3.py

```
import csv
file_name = "details.csv"
with open(file_name, 'r') as csv_file:
    reader = csv.reader(csv_file)
    for row in reader:
        print(row)  # Each row is printed as a list of strings
```

Output:

```
['Name', 'Age', 'District']
['Arun', '20', 'Thrissur']
['Aravind', '21', 'Kollam']
['Shamil', '20', 'Malappuram']
>>>
```

Program 4

Aim:

Write a Python program to read specific columns of a given CSV file and print the content of the columns.

Source Code:

```
import csv

file_name = "details.csv"

columns_to_read = [0, 2]

with open(file_name, 'r') as csv_file:
    reader = csv.reader(csv_file)
    for row in reader:
        selected_columns = [row[i] for i in columns_to_read]
        print(selected_columns)
```

Output:

```
['Name', 'District']
['Arun', 'Thrissur']
['Aravind', 'Kollam']
['Shamil', 'Malappuram']
>>>
```

Program 5

Aim:

Write a Python program to write a Python dictionary to a csv file. After writing the CSV file, read the CSV file and display the content.

Source Code:

```
import csv
data = [
    {"Name": "Ajay", "Age": 21, "District": "Kannur"},
    {"Name": "Sujith", "Age": 21, "District": "Palakkad"},
    {"Name": "George", "Age": 22, "District": "Alappuzha"}
]

file_name = "output.csv"
with open(file_name, 'w', newline='') as csv_file:
    writer = csv.DictWriter(csv_file, fieldnames=data[0].keys())
    writer.writeheader()  # Write the header row
    writer.writerows(data)  # Write the data rows
print(f"Dictionary written to {file_name}.")

print("\nReading and displaying the CSV file content:")
with open(file_name, 'r') as csv_file:
    reader = csv.reader(csv_file)
    for row in reader:
        print(row)
```

Output:

```
Dictionary written to output.csv.

Reading and displaying the CSV file content:
['Name', 'Age', 'District']
['Ajay', '21', 'Kannur']
['Sujith', '21', 'Palakkad']
['George', '22', 'Alappuzha']
>>>
```