Slip 1

1.1

**public** **class** changeCase {

**public** **static** **void** main(String[] args) {

        String str1="Great Power";

        StringBuffer newStr=**new** StringBuffer(str1);

**for**(**int** i = 0; i < str1.length(); i++) {

**if**(Character.isLowerCase(str1.charAt(i))) {

                newStr.setCharAt(i, Character.toUpperCase(str1.charAt(i)));

            }

**else** **if**(Character.isUpperCase(str1.charAt(i))) {

                newStr.setCharAt(i, Character.toLowerCase(str1.charAt(i)));

            }

       }

        System.out.println("String after case conversion : " + newStr);

    }

}

1.2

# Write a python Program to prepare scatter plot for iris dataset

import numpy as np

import pandas as pd

import matplotlib.pyplot as plt

iris = pd.read\_csv("iris.csv")

print(iris.head(20))

plt.plot(iris.Id,iris["sepal.length"],"r--")

plt.show

iris.plot(kind = "scatter", x='sepal.length', y ='petal.length')

plt.show()

1.3

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Student Registration</title>

<style>

body {

font-family: Arial, sans-serif;

background-color: #f4f4f4;

margin: 20px;

}

form {

max-width: 400px;

margin: 20px auto;

background: #fff;

padding: 20px;

border-radius: 8px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

}

label {

display: block;

margin-bottom: 8px;

}

input {

width: 100%;

padding: 8px;

margin-bottom: 10px;

box-sizing: border-box;

}

button {

background-color: #4caf50;

color: #fff;

padding: 10px 15px;

border: none;

border-radius: 4px;

cursor: pointer;

}

</style>

</head>

<body>

<form id="registrationForm">

<label for="firstName">First Name:</label>

<input type="text" id="firstName" name="firstName" required>

<label for="lastName">Last Name:</label>

<input type="text" id="lastName" name="lastName" required>

<label for="age">Age:</label>

<input type="number" id="age" name="age" required>

<button type="button" onclick="validateForm()">Submit</button>

</form>

<script>

function validateForm() {

var firstName = document.getElementById('firstName').value;

var lastName = document.getElementById('lastName').value;

var age = document.getElementById('age').value;

var nameRegex = /^[a-zA-Z]+$/;

if (!nameRegex.test(firstName)) {

alert('First name should contain only alphabets');

return;

}

if (!nameRegex.test(lastName)) {

alert('Last name should contain only alphabets');

return;

}

if (isNaN(age) || age < 18 || age > 50) {

alert('Age should be a number between 18 and 50');

return;

}

alert('Form submitted successfully!');

}

</script>

</body>

</html>