```
[3] from google. colab import drive
    drive .mount('/content/drive')
```

```
Mounted at /content/drive
```

```
# Define the quadratic function
def calculate_temperature(a, b, c, time):
    return a * (time ** 2) + b * time + c

# Hardcoded variables
a, b, c = 0.1, 2, 10
time = 5

# Calculate and display temperature
temperature = calculate_temperature(a, b, c, time)
print(f"Temperature at time {time} hours with hardcoded variables: {temperature}")
```

```
Temperature at time 5 hours with hardcoded variables: 22.5
```

```
# Accept coefficients from user input
a = float(input("Enter coefficient a: "))
b = float(input("Enter coefficient b: "))
c = float(input("Enter coefficient c: "))
time = float(input("Enter time: "))

# Calculate and display temperature
temperature = calculate_temperature(a, b, c, time)
print(f"Temperature at time {time} hours with keyboard input: {temperature}")
10
```

```
Enter coefficient a: 0.1
Enter coefficient b: 2
Enter coefficient c: 10
Enter time: 5
Temperature at time 5.0 hours with keyboard input: 22.5
```

My Drive › SE_LAB › se

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Name	Owner	Last mo...	File size
multiple.txt	me	10:09 PM	45 bytes
single.txt	me	10:09 PM	15 bytes

Files

- ..
- IDS CASE STUDY
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  - SE_LAB EXP 2.ipynb
  - SE_LAB EXP 3.ipynb
  - multiple.txt
  - multiple_inputs.txt
  - single.txt
  - single_input.txt
- archive (4)

+ Code + Text

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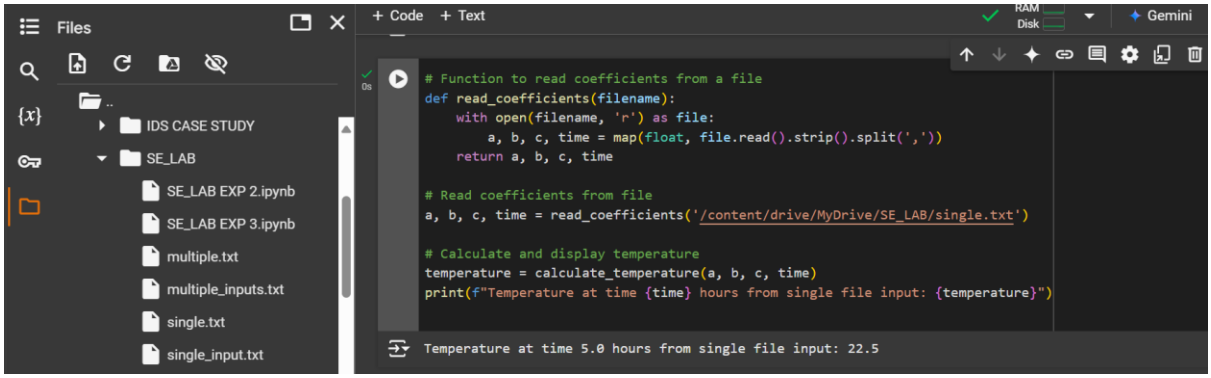
```
# Function to read coefficients from a file
def read_coefficients(filename):
    try:
        with open(filename, 'r') as file:
            return map(float, file.read().strip().split(','))
    except Exception as e:
        print(f"Error: {e}")
        return None

# Read coefficients from file
filename = '/content/drive/MyDrive/SE_LAB/single.txt'
coefficients = read_coefficients(filename)

if coefficients:
    a, b, c, time = coefficients
    print(f"Coefficients read from file: a={a}, b={b}, c={c}, time={time}")
```

```
Coefficients read from file: a=0.1, b=2.0, c=10.0, time=5.0
```


Files
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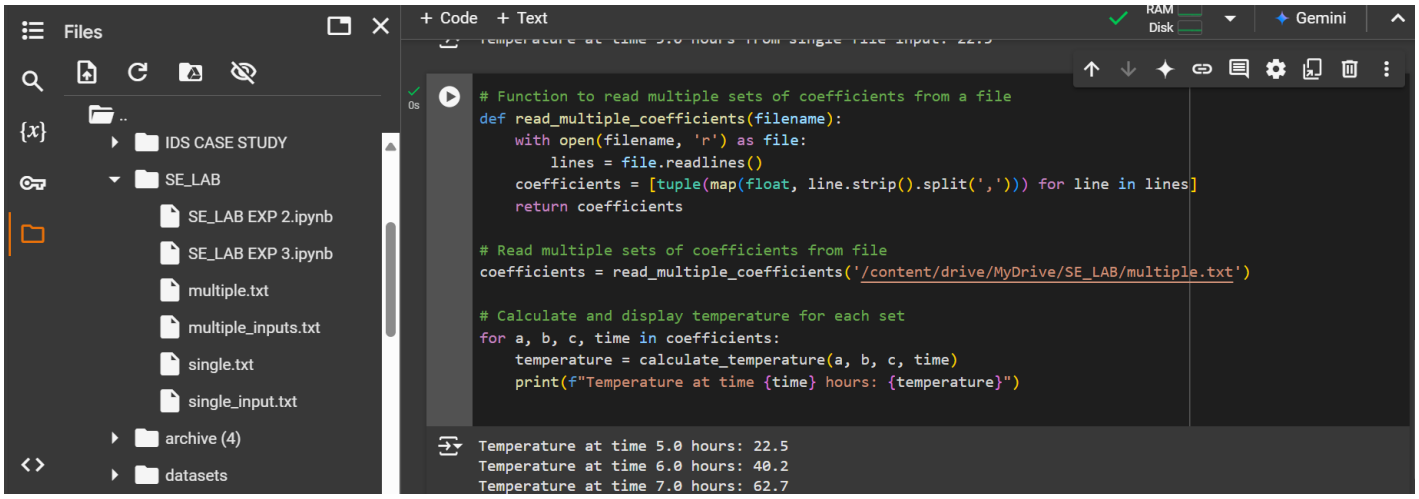
RAM
Disk
Gemini
IDS CASE STUDY
SE_LAB
SE_LAB EXP 2.ipynb
SE_LAB EXP 3.ipynb
multiple.txt
multiple_inputs.txt
single.txt
single_input.txt
# Function to read coefficients from a file
def read_coefficients(filename):
with open(filename, 'r') as file:
a, b, c, time = map(float, file.read().strip().split(','))
return a, b, c, time
Read coefficients from file
a, b, c, time = read_coefficients('/content/drive/MyDrive/SE_LAB/single.txt')
# Calculate and display temperature
temperature = calculate_temperature(a, b, c, time)
print(f"Temperature at time {time} hours from single file input: {temperature}")
Temperature at time 5.0 hours from single file input: 22.5


Files
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RAM
Disk
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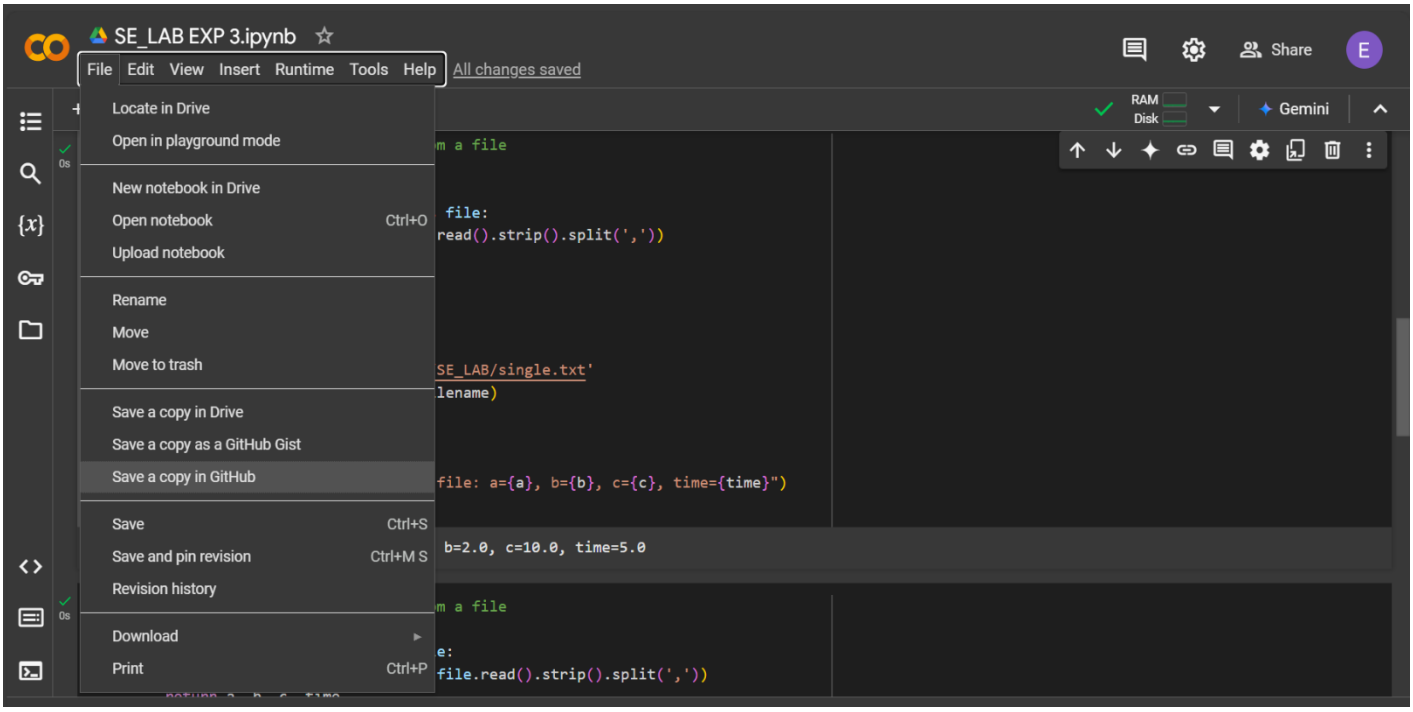
IDS CASE STUDY
SE_LAB
SE_LAB EXP 2.ipynb
SE_LAB EXP 3.ipynb
multiple.txt
multiple_inputs.txt
single.txt
single_input.txt
archive (4)
datasets
# Function to read multiple sets of coefficients from a file
def read_multiple_coefficients(filename):
with open(filename, 'r') as file:
lines = file.readlines()
coefficients = [tuple(map(float, line.strip().split(','))) for line in lines]
return coefficients
# Read multiple sets of coefficients from file
coefficients = read_multiple_coefficients('/content/drive/MyDrive/SE_LAB/multiple.txt')
# Calculate and display temperature for each set
for a, b, c, time in coefficients:
temperature = calculate_temperature(a, b, c, time)
print(f"Temperature at time {time} hours: {temperature}")
Temperature at time 5.0 hours: 22.5
Temperature at time 6.0 hours: 40.2
Temperature at time 7.0 hours: 62.7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Save a copy as a GitHub Gist
Save a copy in GitHub
Save Ctrl+S
Save and pin revision Ctrl+M S
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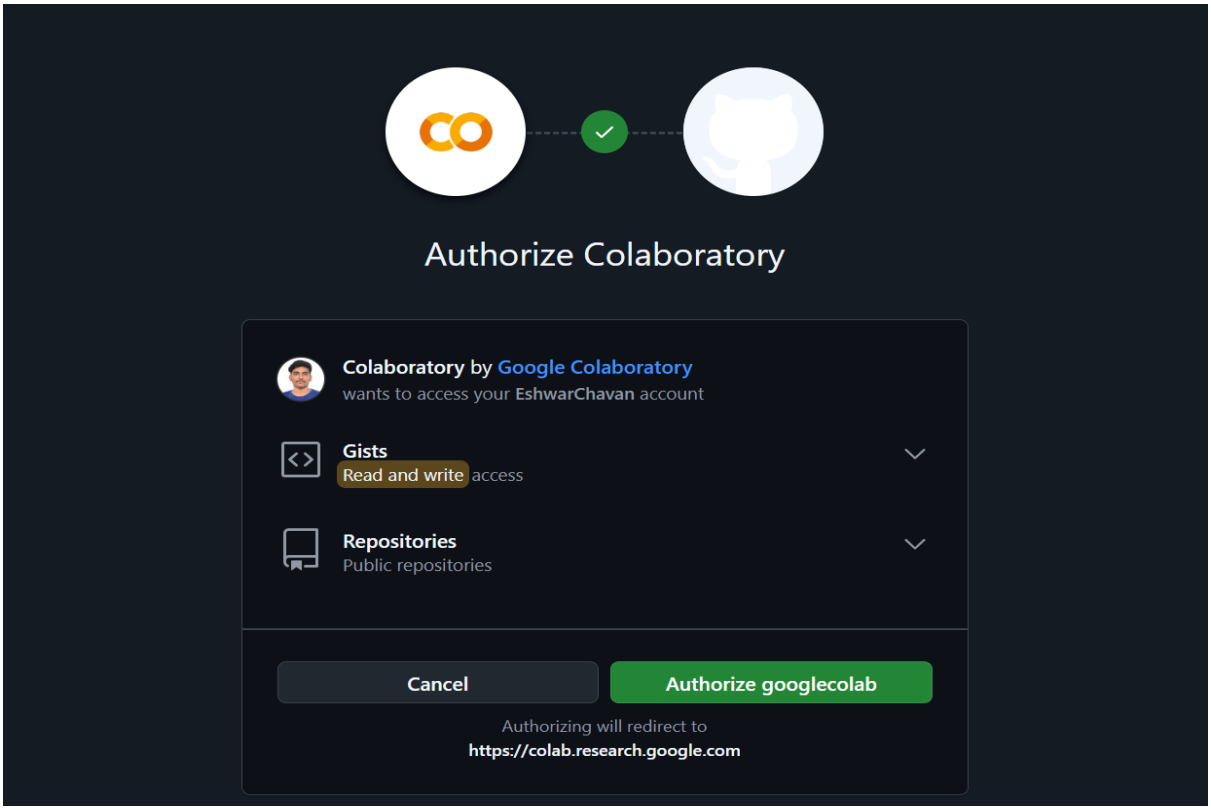
b=2.0, c=10.0, time=5.0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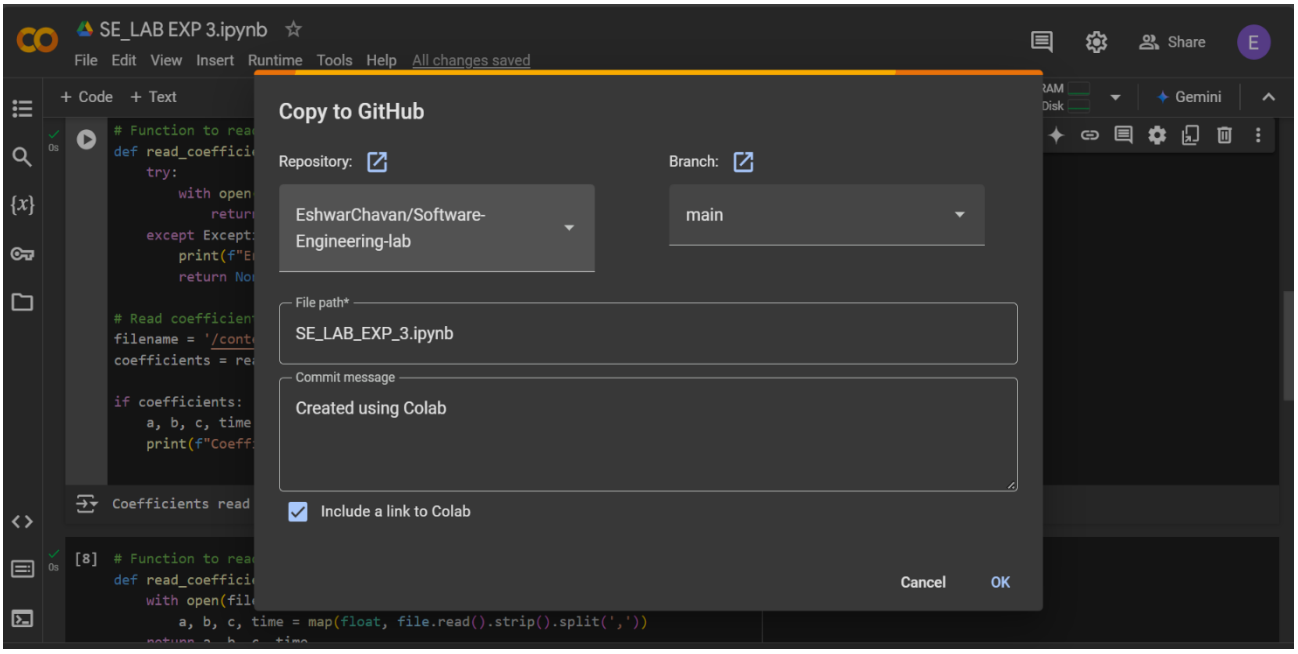
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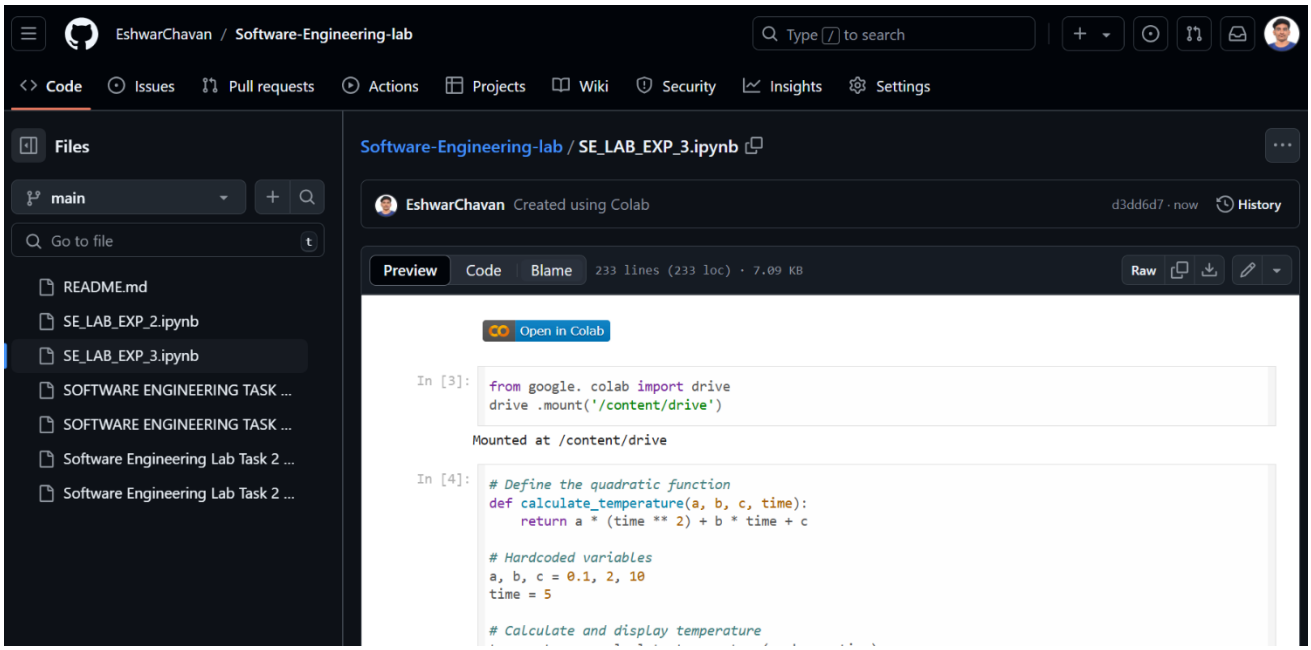
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History
Preview Code Blame 233 lines (233 loc) · 7.09 KB
Raw
Open in Colab
In [3]:
from google. colab import drive
drive .mount('/content/drive')
Mounted at /content/drive
In [4]:
# Define the quadratic function
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Hardcoded variables
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