Software Engineering Task-1

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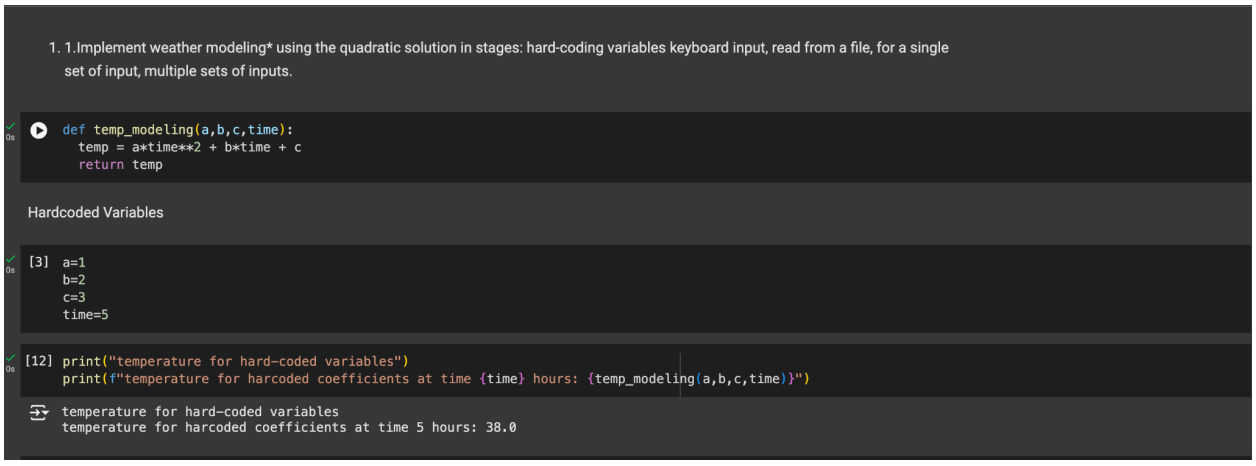
1. **Implement weather modeling* using the quadratic solution in stages: hard-coding variables keyboard input, read from a file, for a single set of input, multiple sets of inputs.**
2. **Save all versions, debug, fix problems, create a Github account**

1. HardCoding Variables and Defining the Quadratic Function



2. Accepting the Variables through the Keyboard

```
[13] a,b,c=(input("Enter coefficients a,b,c separated by space: ")).split( )
     a= float(a)
     b=float(b)
     c=float(c)

     Enter coefficients a,b,c separated by space: 1 2 3

[14] time=float(input("Enter time: "))

     Enter time: 5

[15] print("Temperature for keyboard entered coefficients")
     print(f"temperature for keyboard entered coefficients at time {time} hours: {temp_modeling(a,b,c,time)}")

     Temperature for keyboard entered coefficients
     temperature for keyboard entered coefficients at time 5.0 hours: 38.0
```

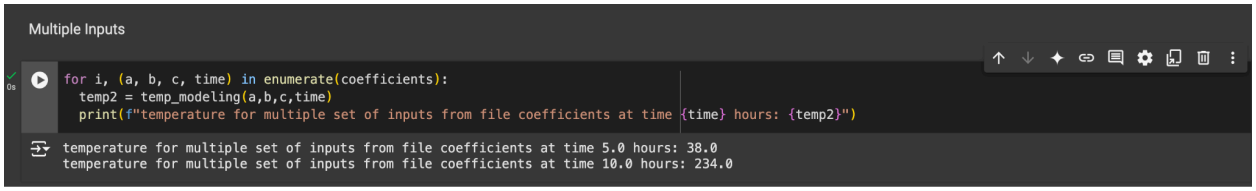
3. Reading the Coefficients from the uploaded file

```
[34] def file_read(filename):
       with open (filename, 'r') as temp_file:
         lines = temp_file.readlines()
       coefficients = [tuple(map(float, line.strip().split(','))) for line in lines]
       return coefficients
```

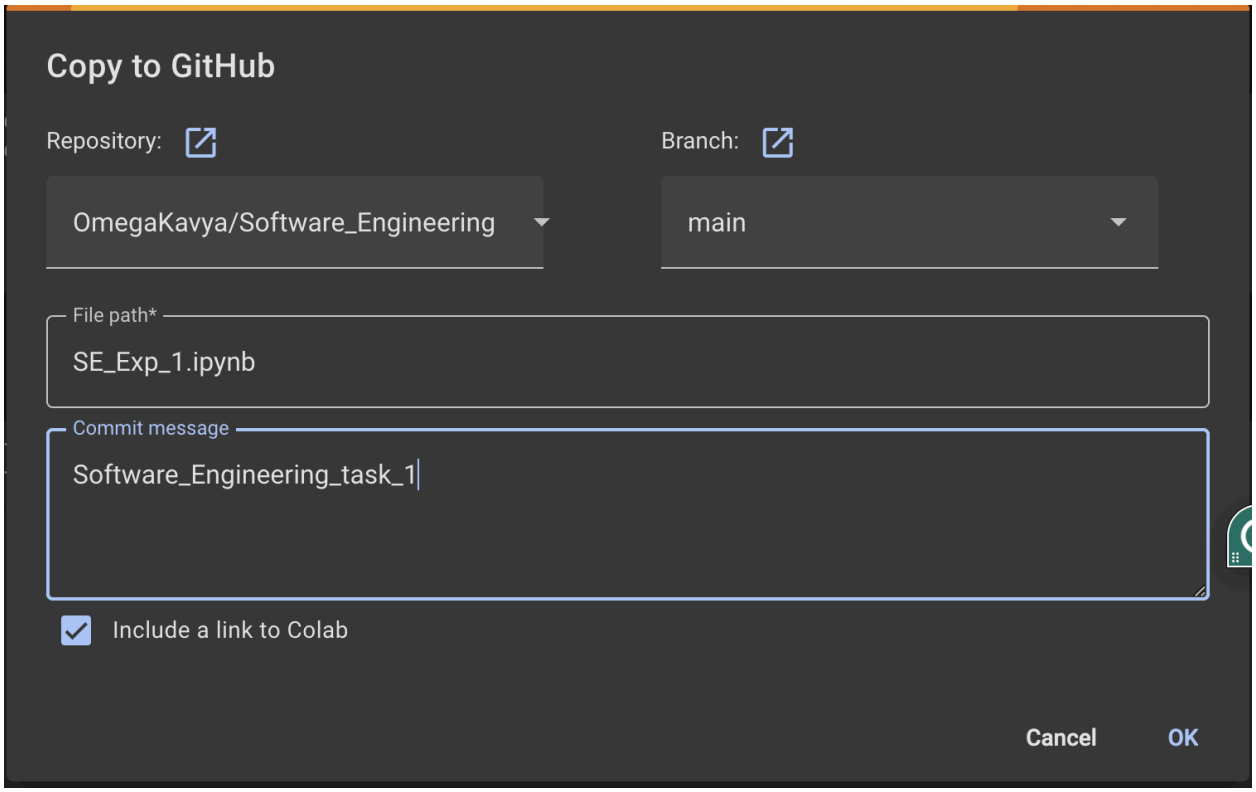
4. Single Set of Inputs

```
For single set of inputs

     coefficients = file_read('/content/weather_modeling.txt')
     a, b, c, time = coefficients[0]
     temp1 = temp_modeling(a,b,c,time)
     print("Temperature for single set of inputs from a file")
     print(f"temperature for single set of inputs from file coefficients at time {time} hours: {temp1}")

     Temperature for single set of inputs from a file
     temperature for single set of inputs from file coefficients at time 5.0 hours: 38.0
```

5. Multiple set of Inputs



6. Pushing The project Into GitHub Repository



7. Pushed Changes on GitHub