Bahria University,

Karachi Campus



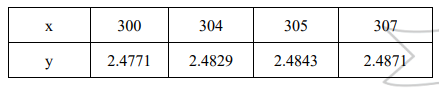
LAB EXPERIMENT NO.

**06**

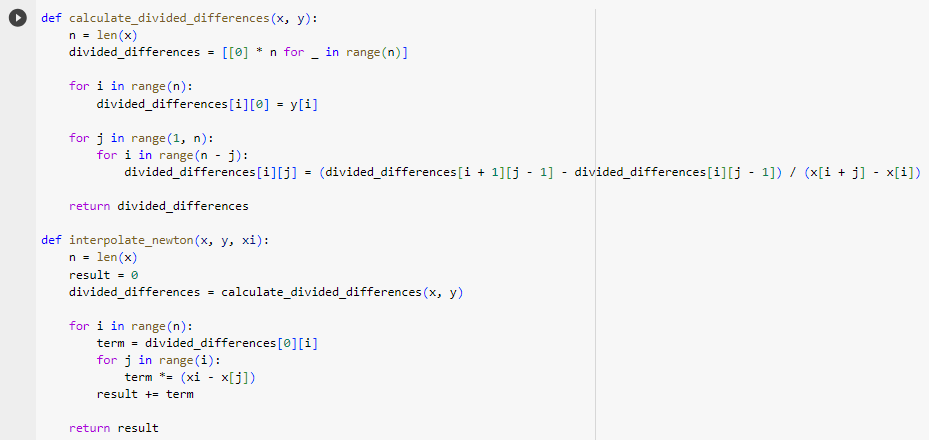
LIST OF TASKS

|  |  |
| --- | --- |
| TASK NO | OBJECTIVE |
| 1 | **Write a python program implementing the newton’s difference formula that considers the following data points, and  a. Find the value of y at x = 301  b. Find the value of y at any given user input** |
| 2 | **Write a Python program that implements Newton's difference formula, reads the CSV file 'salary\_data,' and considers 'years of experience' as x and 'salary' as y. Then, upon user input for a specific number of years of experience, it provides an output of the salary they would receive.** |
| 3 | **Write a python program implementing the Lagrange interpolation formula that considers the following data points, and find the value of y at x = 7** |

**Task 1: Write a python program implementing the newton’s difference formula that considers the following data points, and   
a. Find the value of y at x = 301   
b. Find the value of y at any given user input**

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**Solution**

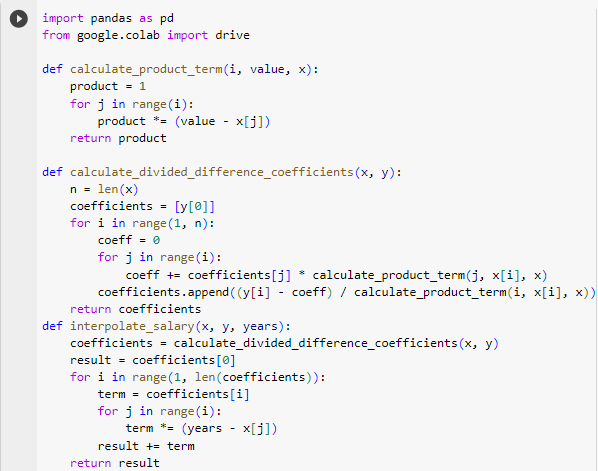
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**A screenshot of a computer code

Description automatically generated**

**Task 2: Write a Python program that implements Newton's difference formula, reads the CSV file 'salary\_data,' and considers 'years of experience' as x and 'salary' as y. Then, upon user input for a specific number of years of experience, it provides an output of the salary they would receive.**

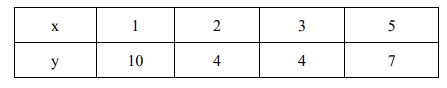
**Solution**

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**A screenshot of a computer program

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**Task 3: Write a python program implementing the Lagrange interpolation formula that considers the following data points, and find the value of y at x = 7**

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**Solution**

**A screenshot of a computer program

Description automatically generated**