*Logic Specification Template*

|  |  |  |  |
| --- | --- | --- | --- |
| **Student** | Adrián Marcelo Suárez Ponce A01197108 | **Program #** | 7 |

|  |  |
| --- | --- |
| **Class Name** | main |

|  |  |
| --- | --- |
| **Method Name** | parseFile() |

|  |  |
| --- | --- |
| **Parameters** | filename: stirng |
|  | Data: HistoricalData |
|  |  |
|  |  |
|  |  |

Diagram

Description automatically generated

|  |  |
| --- | --- |
| **Class Name** | main |

|  |  |
| --- | --- |
| **Method Name** | parseLine() |

|  |  |
| --- | --- |
| **Parameters** | Line: string |
|  |  |
|  |  |
|  |  |
|  |  |

**Diagram

Description automatically generated**

|  |  |
| --- | --- |
| **Class Name** | main |

|  |  |
| --- | --- |
| **Method Name** | printResults() |

|  |  |
| --- | --- |
| **Parameters** | N: int |
|  | X: vector<double> |
|  | regressionParams: vector<double> |
|  | Prediction: double |
|  |  |

**Diagram

Description automatically generated**

|  |  |
| --- | --- |
| **Class Name** | HistoricalData |

|  |  |
| --- | --- |
| **Method Name** | addData |

|  |  |
| --- | --- |
| **Parameters** | Obs: vector<double> |
|  |  |
|  |  |
|  |  |
|  |  |

**Diagram

Description automatically generated**

|  |  |
| --- | --- |
| **Class Name** | HistoricalData |

|  |  |
| --- | --- |
| **Method Name** | sum |

|  |  |
| --- | --- |
| **Parameters** | P: pair<int, int> |
|  | P2: pair<int,int> |
|  |  |
|  |  |
|  |  |

**Diagram

Description automatically generated**

|  |  |
| --- | --- |
| **Class Name** | MultipleRegression |

|  |  |
| --- | --- |
| **Method Name** | predict |

|  |  |
| --- | --- |
| **Parameters** | params: Vector<double> |
|  |  |
|  |  |
|  |  |
|  |  |

**Diagram

Description automatically generated**

|  |  |
| --- | --- |
| **Class Name** | MultipleRegression |

|  |  |
| --- | --- |
| **Method Name** | fit |

|  |  |
| --- | --- |
| **Parameters** | Data: HistoricalData |
|  |  |
|  |  |
|  |  |
|  |  |

Diagram

Description automatically generated

|  |  |
| --- | --- |
| **Class Name** | MultipleRegression |

|  |  |
| --- | --- |
| **Method Name** | fillMatric |

|  |  |
| --- | --- |
| **Parameters** |  |
|  |  |
|  |  |
|  |  |
|  |  |

**Diagram

Description automatically generated**

**Include the image of the activity diagram created for the program:**

Por medio de este párrafo yo **Adrián Marcelo Suárez Ponce,** certifico que soy el autor intelectual del material que arriba entrego y que no realicé una copia de ninguna otra persona. En aquellos casos en los que tuve que incluir material de otra persona, reporté su apropiada referencia.