*Logic Specification Template*

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| **Student** | Gerardo Aldair Ponce Gomez | **Program #** | 4 |

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| **Class Name** | Calcular |

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| **Method Name** | calculaGamma |

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| **Parameters** | x: double |
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| If x ==1 |
| Return 1 |
| Else if (x == 0.5) |
| Return sqrt(pi) |
| Else |
| Return (x-1) gamma(x-1) |
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| **Class Name** | Calcular |

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| **Method Name** | calculaValor |

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| **Parameters** | x: double |
|  | dof: int |
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| xi = 0 |
| W = x/numseg |
| step1, step2, aux |
| fx = 0 |
| Vector<double> myVector |
| num\_seg= 10 |
| Gamma = calculaGamma(x) |
| distT = Se calcula totalmente gamma |
| Ciclo for hasta numero de segmentos{ |
| Xi = W \* i |
| Step1 = Se calcula primera parte de t |
| Aux = Guarda el calculo de la potencia |
| Step2 = pow(step1,aux) |
| Fx = gamma \* step2 |
| Se meten datos al vector |
| } |
| Double acum4 = 0 |
| Ciclo for de 2 en 2 { |
| Aux = Agarra los valores del vector y los multiplica por 4 |
| Acum4 += aux |
| } |
| Double acum2 = 0 |
| Ciclo for de 2 en 2{ |
| Aux = Agarra los valores del vector y los multiplica por 2 |
| Acum2 += aux |
| } |
| Double P = 0 |
| Aux = W/3 |
| P= Calcula la ecuación final |
| Return p |
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| **Class Name** | Imprimir |

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| **Method Name** | vacioDatos |

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| **Parameters** | - |
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| Cout << “ERROR Faltan campos obliglatorios” |
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| **Class Name** | Imprimir |

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| **Method Name** | errorDatos |

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| **Parameters** | - |
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| Cout << ERROR valores inválidos |
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| **Class Name** | Imprimir |

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| **Method Name** | imprimeResultados |

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| **Parameters** | x: double |
|  | dof: int |
|  | p: double |
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| Cout << “X = “ << x |
| Cout << “dof = “ << dof |
| Cout << “p = “ << p |
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