Write a program to count the total program LOC, the total LOC in each object the program contains, and the number of methods in each object. Produce a single LOC count for an entire source program file and separate LOC and method counts for each object. Print out each object name together with its LOC and method counts. Also print out the total program LOC count. If an object-oriented language is not used, count the procedure and function LOC and print out the procedure and function names and LOC counts.

Also, identifies modified, deleted, and reused LOC and list them as well

Use the counting standard produced by report exercises R1. It is acceptable to enhance program 1B..

TEST RESULT FORMAT – PROGRAM 2B

1. Format for object-oriented program designs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Program Number | Object Name | Number of Methods | Object NEW LOC | Object REUSE LOC | Object Modified LOC | Object Deleted LOC | Total Program LOC |
| 1A |  |  |  |  |  |  |  |
| 2A | reales | 3 | 79 |  |  |  |  |
|  |  |  |  |  |  |  | 79 |
| 3A | lista | 5 | 35 |  |  |  |  |
|  | main | 3 | 76 |  |  |  |  |
|  | nodo | 4 | 17 |  |  |  |  |
|  | operaciones | 1 | 59 |  |  |  |  |
|  |  |  |  |  |  |  | 187 |
| 1B | loc | 1 | 50 |  |  |  |  |
|  | main | 1 | 27 |  |  |  |  |
|  |  |  |  |  |  |  | 77 |
| 2B | loc | 1 | 51 |  |  |  |  |
|  | main | 1 | 84 |  |  |  |  |
|  |  |  |  |  |  |  | 136 |

1. Format for non-object-oriented designs

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Program Number | Procedure/Function Name | Number of methods | Procedure/Function LOC | Procedure/FunctionREUSE LOC | Procedure/FunctionModified LOC | Procedure/Function  Deleted LOC | Total Program LOC |
| 1A |  |  |  |  |  |  |  |
| 2A | reales | 1 | 79 |  |  |  |  |
|  |  |  |  |  |  |  | 79 |
| 3A | lista | 1 | 35 |  |  |  |  |
|  | main | 1 | 76 |  |  |  |  |
|  | nodo | 1 | 17 |  |  |  |  |
|  | operaciones | 1 | 59 |  |  |  |  |
|  |  |  |  |  |  |  | 187 |
| 1B | loc | 1 | 50 |  |  |  |  |
|  | main | 1 | 27 |  |  |  |  |
|  |  |  |  |  |  |  | 77 |
| 2B | loc | 1 | 51 |  |  |  |  |
|  | main | 1 | 84 |  |  |  |  |
|  |  |  |  |  |  |  | 136 |

TEST - Manually compare LOC from 1B and 2B y check if the counts are correct