

Algorithm 1: Algorithm to Create and Verify Dimension Vector V

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Algorithm to Create and Verify Dimension Vector V
1. function cleanData()
2.   remove null values
3.   remove negative values
4. end-function
5. function verifyInput(attributevalue)
6.   if (attributevalue!=Null && attributevalue>0) then
7.     return true
8.   else
9.     return false
10.  endif
11. end-function
12. function convertFinalTotal(totalvalue)
13.  if (totalvalue<50) then
14.    return 0
15.  elseif (totalvalue>=50) then
16.    return 1
17.  endif
18. end-function
19. function buildDimensionVector()
20.  V = [[]]
21.  for each studentk do
22.    for each session 1 to n do
23.      for each row in Sessioni do
24.        for each Dimensionj do
25.          if verifyInput (Dimensionj)== true then
26.            attributek←aggregate (sum(Dimensionj))
27.          endif
28.        endfor
29.      endfor
30.      V[studentk][attribute] ←attributek
31.      V[studentk]["final_total"] ← convertFinalTotal(finalMarks)
32.    endfor
33.  end-function
34. function calculateAttendance(StdID)
35.  read logs.txt file
36.  read row for StdID
37.  total =  $\sum_1^n sessions_{studentID}$ 
38.  return total
39. end-function
40. /*-----Main-logic-Start-----*/
41. n = 6; k = 115
42. cleanData()
43. buildDimensionVector()
44. DV ← false
45. for each rowr in V do
46.  StudentID ← V [rowr]["StudentID"]
47.  totalattendance = calculateAttendance(StudentID)
48.  if calculateAttendance(StudentID)==6 then
49.    DV ← true
50.  else
51.    DV ← false
52.  endif
53.  if DV == true then
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54.   V [rowr] is validated
55. else
56.   V [rowr] is not validated
57. endif
58. endfor
59. /*-----Main-logic-End-----*/
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