ESTIMATE.EXE

Algorithms

1. GPA Calculator:

Credits $= x_1, x_2, x_3 \ldots$

Grades $= y_1, y_2, y_3 \ldots$

$$GPA = \frac{x_1y_1 + x_2y_2 + x_3y_3 + \ldots}{x_1 + x_2 + x_3 + \ldots}$$

2. CGPA estimator:

i. CGPA Calculation with grades and credits:

Credits $= x_1, x_2, x_3 \ldots$

Grades $= y_1, y_2, y_3 \ldots$

Let $a = x_1y_1 + x_2y_2 + x_3y_3 + \ldots$

$b = x_1 + x_2 + x_3 + \ldots$

Previous CGPA $= m$

Previous total credits $= n$

$$CGPA = \frac{(m \times n) + a}{n + b}$$

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ii. CGPA estimation with GPA:

GPA = p

Credits = q

Previous CGPA = m

Previous total credits = n

$$CGPA = \frac{(P \times q) + (m \times n)}{n + q}$$

iii. GPA estimator:

Previous CGPA = m

Previous total credits = n

Target CGPA = k

Credits = l

$$GPA\ (estimated) = \frac{k(n+l) - (n \times m)}{l}$$