

Variable	Description	Value
$x(n-1)$	n^{th} term of X	none
$y(n-1)$	n^{th} term of Y	none
n	position of the term in the AP starting from 0	none
d	common difference between the terms of AP	none
$X(z)$	z-transform of x(n)	$x(0) \cdot U(z) + d \cdot -z \cdot \frac{d(U(z))}{dz}$
$Y(z)$	z-transform of y(n)	$y(0) \cdot U(z) + d \cdot -z \cdot \frac{d(U(z))}{dz}$
$U(z)$	z-transform of u(n)	$\sum_{n=1}^{\infty} z^{-n}$
$\frac{d(U(z))}{dz}$	Derivative of U(z)	$-\sum_{n=1}^{\infty} n z^{-n-1}$

Table 1: **VARIABLES AND THEIR VALUES**