

# Assignment

Subject: ECE-3131  
Name: Asif Bin Kabir

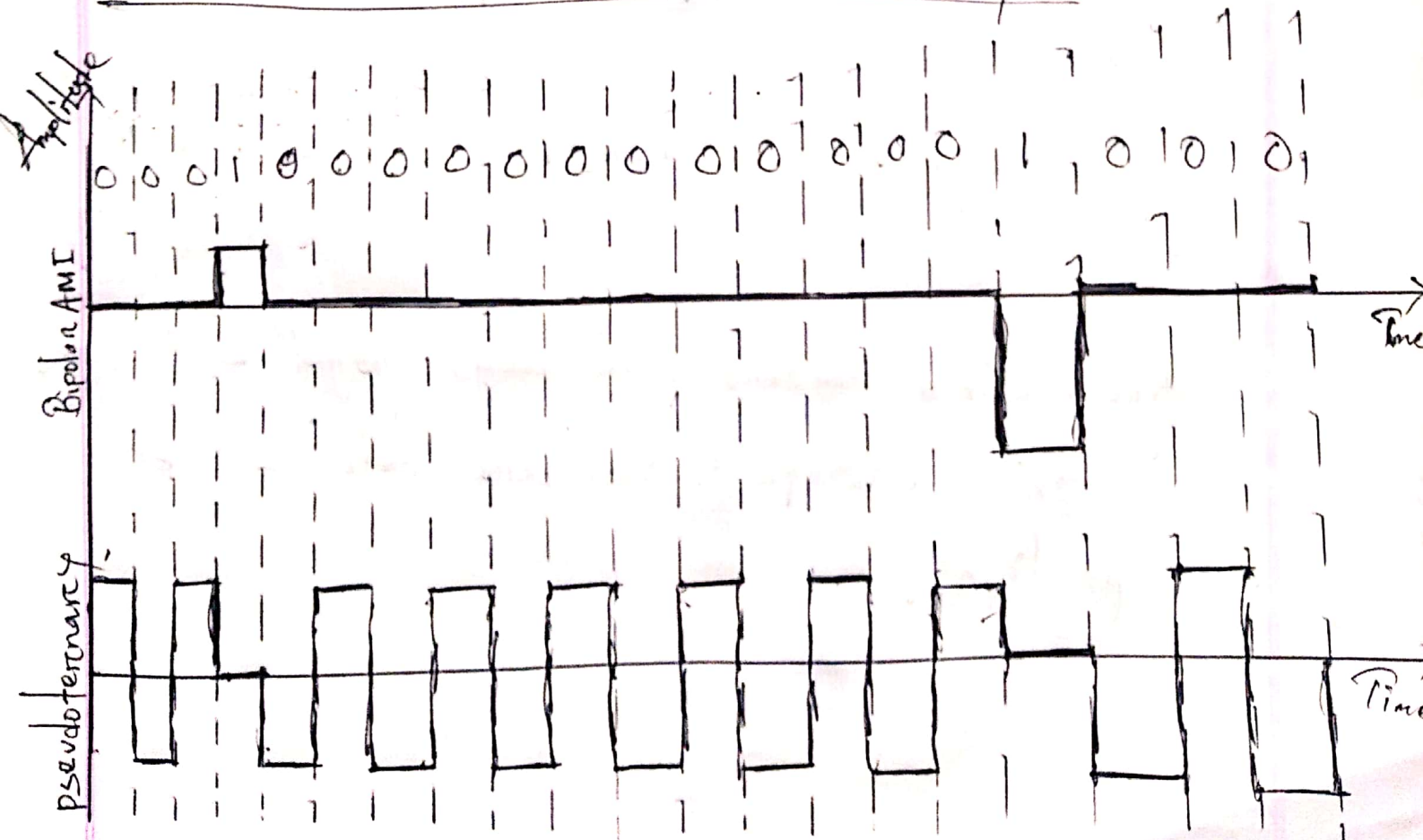
Given,  $(108122)_{10} = (11010011001011010)_2 = x$  ID: 1710876122

$(589960)_{10} = (10010000000010001000)_2 = y$

~~$(108122)_{10}$~~   $x = 00011010011001011010$   
 $y = 10010000000010001000$

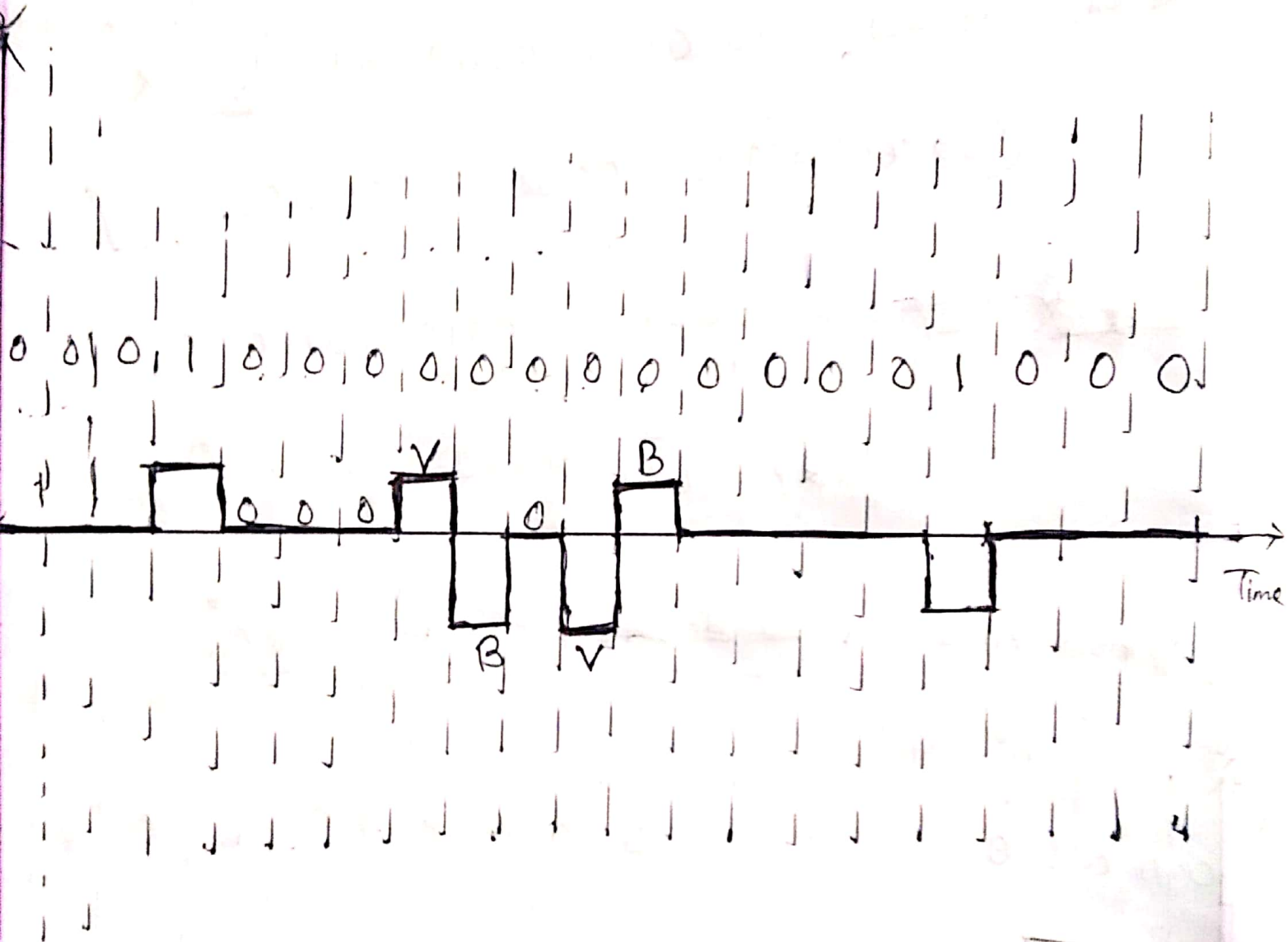
$x \oplus y = 0001000000000001000$

Bipolar AMI and ~~pseudoternary~~ pseudoternary:



## \* B82S scrambling technique:

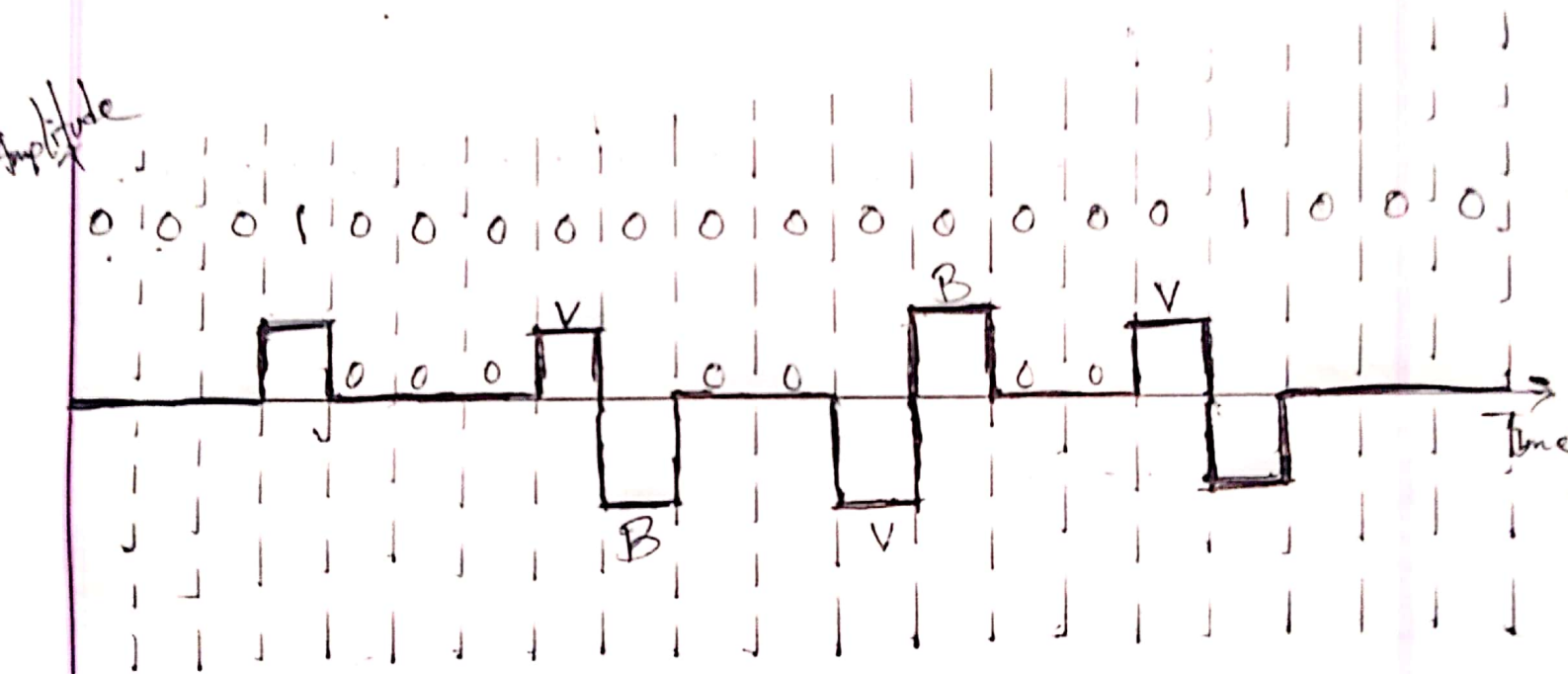
Given digital data  $\rightarrow 00010000000000000001000$



Here previous non zero state was negative, so, in this data first non-zero state will be positive.

\* HDB3 scrambling technique:

Given digital data  $\rightarrow$  0001000000000000001000



Last pulse	odd	even
-	000 -	+00 +
+	000 +	-00 -