$$= 50 + \frac{30 - 20}{100 - 20}(40 - 50)$$

$$= 50 - \frac{10}{8}$$

$$= 48.75$$

∴ New code (P_1) point is (30, 48.75)

Now code (P_2) = 0010

∴ Bit 3 = 1

∴ So the line is interseect with x_{max}

∴ $x = x_{max} = 90$

$$\therefore y = y_0 + \frac{x - x_0}{x_1 - x_0}(y_1 - y_0)$$

$$= 50 + \frac{90 - 20}{100 - 20}(40 - 50)$$

$$= 50 + \frac{7}{8}(-10)$$

$$= 41.25$$

∴ New code (P_2') point is (90, 41.25)

∴ New code (P_1) = 0000

∴ New code (P_2) = 0000

→ First test:

code (P_1) | code (P_2) = 0000

→ accept.