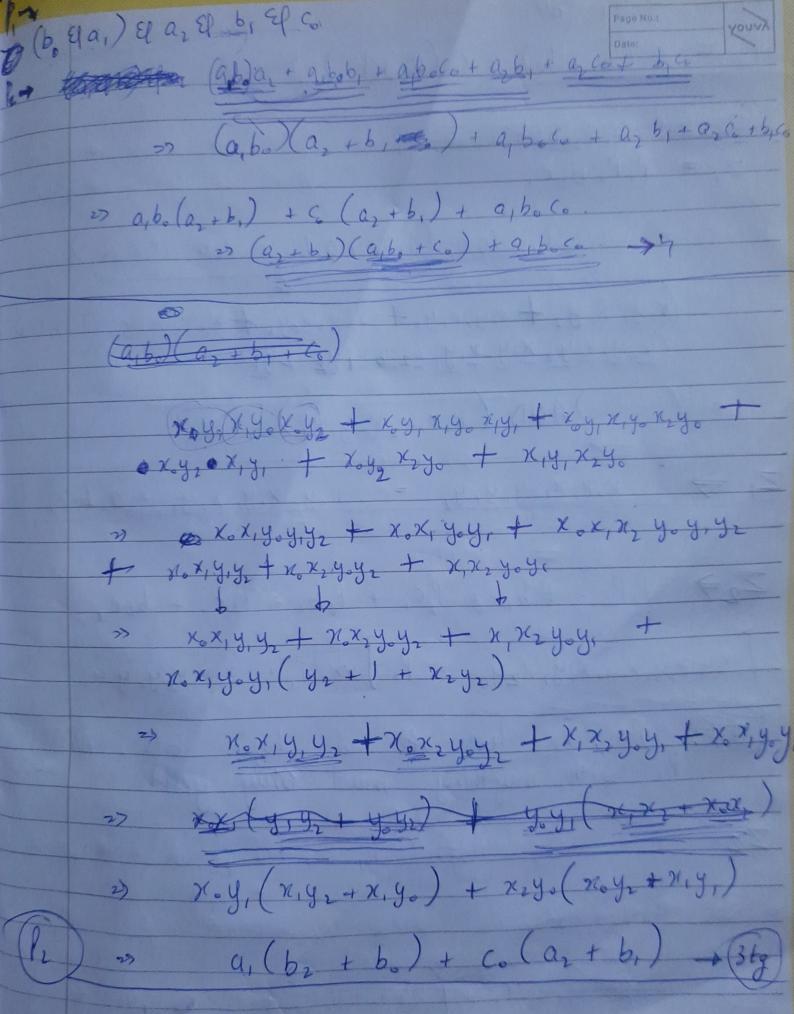
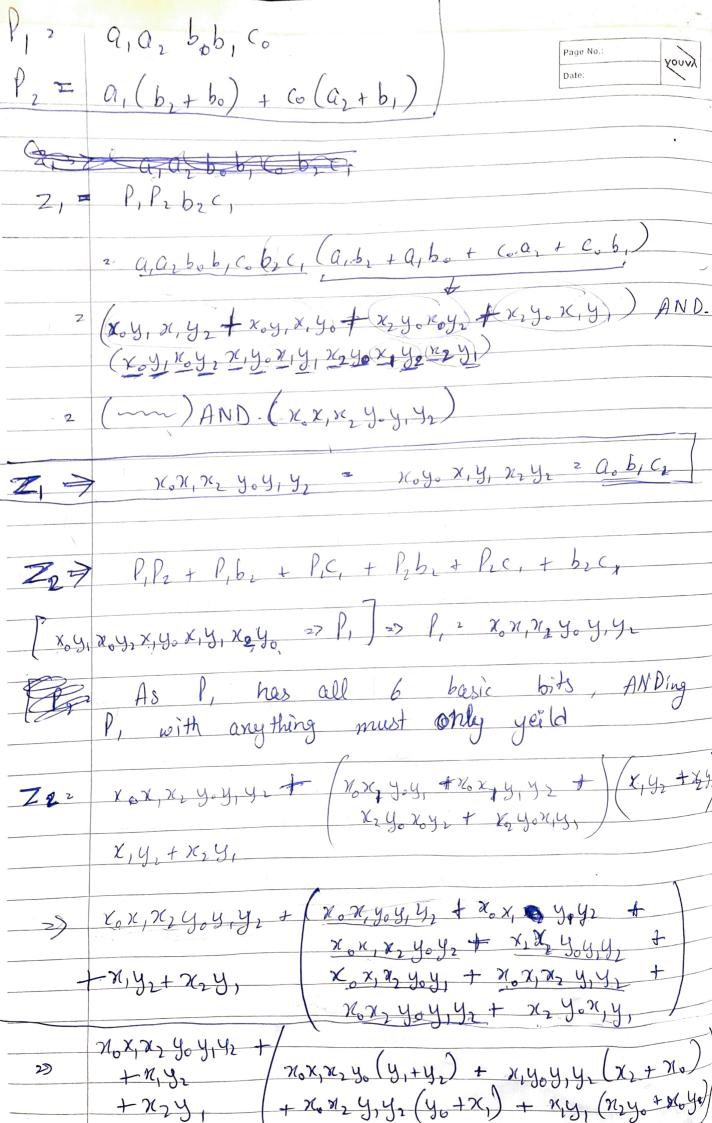
Youn o Let 2 numbers be X El Y Both 3-bit length -> X 2 x, x, x, x, x + LSP Y 2 y, y, 4 LSP Products - De Cr C, Co
R5 R4 R3 R2 R1 R0 where ao = noyo bo = x, yo co = x240 Some nomenclature -He Ale final 6-bit result is

R5 R4 R3 R2 R, R0. 4 65B There is no carry generated for he and R, computation. \* The carry generated at R, (ie, for R) has been named as has not been named.
as 9+ 9s (a, El 60) only.

\* Me carry generated (ie, for R3) 6 at Rz- Page No.: is represented Dato: by P, 21 P. .. As those are total 4-bits in R2 position If all are 1, there would be two carry bits carried R<sub>3</sub> R<sub>2</sub> over to R3 that's when P, ElPz Similarly at Rz there are 4-bits hence two carries can be generated for Ry, on they are represented by. 2, 4 22 I carry bit can be generated of for Rs computation for R5 would be done likewise because there are no partial product bits for R5 anyways.





2 9 9 9 2, 8 22 = 2, (x, x, x, y, y, 42) = a, b, c2 + (noxxx [x,yo(y,+y2) + y,y2(y0+x,)] + (x,y, [y0y2(x2+x0) + (x2y0+x0y2)]) + x142 + 124 2) 6tg. 2, (as 2, has all 6 basic bits xx, x, y, y, y, y) ée for zicz (Ez = n,y,) x2 y2 x0x, x2y0 y1 y2 + x1 y2 + x2y, nox, yoy, y20 + x0 x, y, 41 + xox, x2 yoy, + x, n2 yoy, y2 + nox, x2 yoy, + xox, x2 y, 42 + Nox, yo y, y, + x2 yo x,y, 1 + (nox, 202 yoy, 4) + (nox, x2 yoy, y2+ 23 non, 72 yoy, 42 x0x, 712 y0 y2 + 12, 212 40 41 42 + + x1x242 (XOX, X2 YOY, Y2 + XOX, X2 Y, 42 + + 1174,42 x0x2 y0y1 y2 + x2 y0 x1 y1 y2/ n non, x2 you, 42 + X, x2 yoy, y2 20212404142 + 1/11/42 + 2022 404, 42 + xox, x2 40 42 + 724,42 + (x2404) (x0x14, + x,4, + 26x, + x64,) 2) non, no yoy, 42 + 7/12/42 +7/2 4/4/2