HW 6 Alex Mandzyuk 1)a) P= ({9, p}, {0,1}, {2, x}, 8, e, 20, {p}) Stral $\in X/E$ P, ({q,1,-3, {0,13, {2, X}, d, e, 20 E,x/E 1,x/xx 1,20/20 E,X/E

6.2.1 b, c b) Set of all strings S.t. no prefix
Nas more 13 than O'S. Accept by final state P= ({ 20, 9, 92, 23, 80, 13, {20, x3, 5, 20, 20, 20) O,X/XX 1,×/E 0, 70/X20 J 1,20/20 E, 7/20 Set of all strings of o's and 1's with an

equal number of 0's and 1's

Accepting by empty stack $1, \times / \times \times$ 0, X/E PN=(690,9,93, 80,13, (20,x3, 5, 20, 2.) 1,20/x20 7 E, Z, / Z, €, ₹0/€ (40 E, Zo/20 0,20/12. D, XXX

addabb

L= {w w is of the form and, h > 0} 9,20/X20 a, X/XXb, x/E

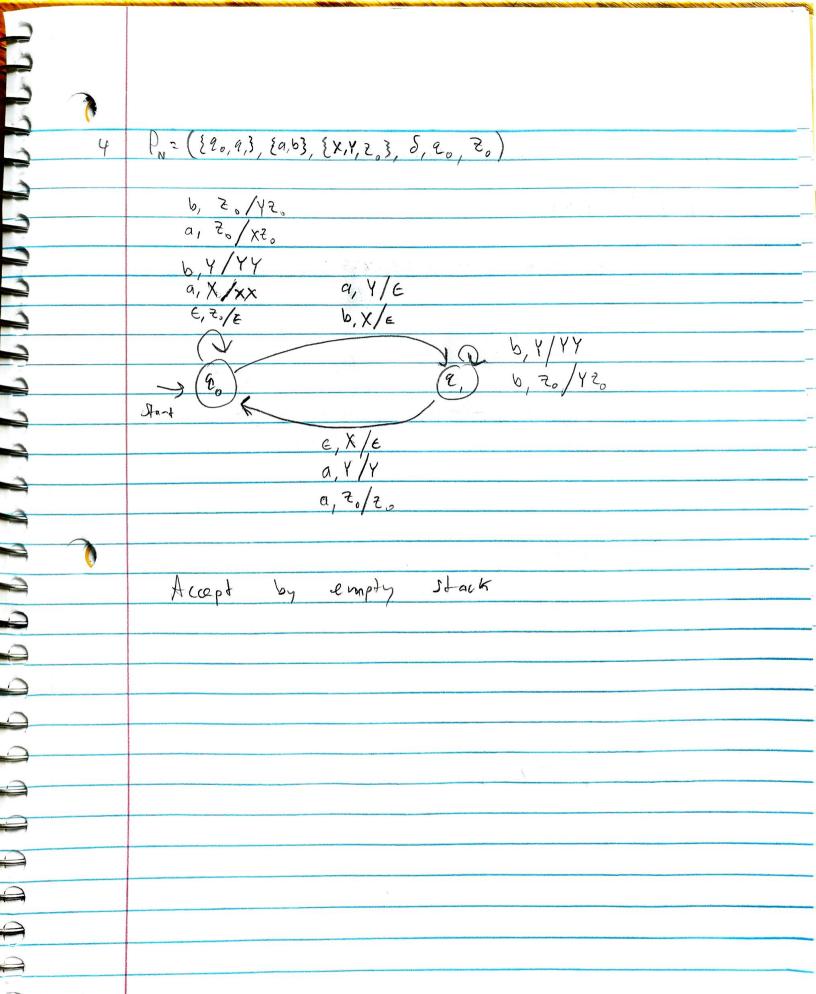
€, 2,/2,

P= ({ 9,192,93,94,95}, {a,b}, {X, 20}, 5, 9, 20, {20})

Accepting by final State

 $\epsilon, x/x$

T



5) Convert the grammar SHAAA A + as/65/a a PDA that accepts the Some longuage by empty stack P=({20,9,3, {a,63, {a,63, {A}}, .5, .8} a, A/E b, A/S a,S/AA $\epsilon, \epsilon/\epsilon$ $\rightarrow (9)$ Stord

6) Sive Leferministic PDA to accept: a) {on in lumm } by final state P: ({90,9,,42,93, {0,13, {20, x3, 8, 90, 70, {43}}) $0, \times/\times\times$ $0, \frac{7}{6}, \times/2$ $0, \frac{7}{6}, \times/2$ $0, \frac{7}{6}, \times/2$ $0, \frac{7}{6}, \frac{7}{6$ b) { on n 2m} by final state P: ({20,9,92,93}, {0,13, {20, X3, 6, 90, 20, 933}) 1, X/E 0, x/xx E, 70/2,