| COS 451/550 Fall 2019 Class Exercise $21 \quad 2$ questions; 2 pgs. | 2019-11-15 |
| :--- | :--- | :--- |
| (c) 2019 sudarshan s. Chawathe |  |

Today: Post Correspondence Problem. § 5.2.
Next class: Mapping reducibility. § 5.3.
Reminders: Homework. Reading. Newsgroup.

1. List the members of your group below. Underline your name.
2. Solve the following instances of the Post Correspondence Problem. The first is from Post's original paper describing the problem, ${ }^{1}$ which is very readable.
(a) $\left\{\left[\frac{b b}{b}\right],\left[\frac{a b}{b a}\right],\left[\frac{b}{b b}\right]\right\}$
(b) $\left\{\left[\frac{a b}{a b a b}\right],\left[\frac{b}{a}\right],\left[\frac{a b a}{b b}\right],\left[\frac{a a}{b b}\right]\right\}$
(c) $\left\{\left[\frac{b b a}{b}\right],\left[\frac{b}{a}\right],\left[\frac{a}{b b a}\right]\right\}$

[^0][additional space for answering the earlier question]


[^0]:    ${ }^{1}$ Emil L. Post. A variant of a recursively unsolvable problem. Bulletin of the American Mathematical Society, 52:264-268, April 1946

