CISP 440

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Homework 14

*These expressions were all generated using Wikipedia’s description of Regular Expressions*

1. English 🡪 Expressions
   1. a (aa)\*
   2. [ab]4
   3. ^(a|c) b$
   4. (a|b)\* b+ (a|b)\* b+ (a|b)\*
   5. a{1, } b{1, }
   6. (aa|bb)+
   7. (aa){0} (bb){0}
   8. (aba|bab)+
   9. (aa)+
2. Expressions 🡪 English
   1. All strings containing exactly two b’s
   2. All strings beginning with a, and ending in double a’s followed by double b’s which contain no other instances of double b’s except the one at the end
3. Matching (regex = b+ a3 (b+ λ) a2 (a+ b)\*
   1. Matches
   2. Matches
   3. Does not match
   4. Does not match
4. S
   1. Matches (therefore no circle)
   2. Matches (therefore no circle)
   3. baaaaabbaa
   4. aaabaa
5. “a” is the shortest possible string that would not match the regular expression
6. “baaabaa” is the shortest possible string that would match the regular expression