08 Handwritten

1. **Give as examples of some strings that would match the following patterns:**
   a. `b[ea]d`

   b. `19*2`

   c. `(ay|c)+bb`

   d. `[0-9a-b]*`

2. **Indicate whether the following strings would match the regular expression:**

   `101*01`

String	Match (Yes or No)
1001	
100101	
10101	
1011101	

Regex Lecture Reference

Square Brackets

`[abcd]`	Square brackets say, match any character in this set
`[a-z0-9]`	You can also specify ranges using dash
`[^a-z]`	Square brackets with a caret ^ at the start says 'not in this set'

Sequences

`\d`	Any decimal digit
`\D`	Any non-digit character
`\s`	Any whitespace character
`\S`	Any non-whitespace character
`\w`	Any alphanumeric character
`\W`	Any non-alphanumeric character

Repeating Things

`[0-9]+`	Plus matches **one or more** occurrences
`[0-9]*`	Asterisk matches **zero or more** occurrences
`[0-9]?`	Question marks matches **zero or one** occurrences
`[0-9]{1,2}`	Braces are used for specifying **exactly** how many times something should repeat {min, max}

Brackets and ORs

`(abc)|(dfg)`	Would match abc or dfg
`(abc)|([0-9])`	Would match abc or a single number

08 Handwritten Answers

3. **Give as examples of some strings that would match the following patterns:**

   a. `b[ea]d`

      ```
      bed
      bad
      ```

   b. `19*2`

      ```
      12
      192
      1992
      19992
      ```

   c. `(ay|c)+bb`

      ```
      aybb
      cbb
      ayaybb
      cccbb
      ```

   d. `[0-9a-b]*`

      ```
      09030ab
      0a
      0
      a
      ```

4. **Indicate whether the following strings would match the regular expression:**

   `101*01`

String	Match (Yes or No)
1001	Yes
100101	No
10101	Yes
1011101	Yes