

Understanding Strings

Goals and Objectives

Why Work with Strings?

- Numbers are stored in a computer
 - In memory, on a flash drive, on a hard drive

- .mp4

01001001	01000100	00110011	00000011	00000000	00000000
00000000	00000000	00000000	01010000	01010100	01000011
01001111	01001110	00000000	00000000	00000000	00000110
00000000	00000000	00000000	01000010	01101100	01110101
01100101	01110011	01010100	01000001	01001100	01000010
10001001	01010000	01001110	01000111	00001101	00001010
00011010	00001010	00000000	00000000	00000000	00001101
01001001	01001000	01000100	01010010	00000000	00000000
00000001	00101100	00000000	00000000	00000000	11001000
00001000	00000110	00000000	00000000	00000000	01010010
01010100	01101000	01100101	00100000	01000011	01100001
01110011	01101011	00100000	01101111	01100110	00100000
01000001	01101101	01101111	01101110	01110100	01101001
01101100	01101100	01100001	01100100	01101111	00001010
01000101	01100100	01100111	01100001	01110010	00100000

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01001111	01001110	00000000	00000000	00000000	00000110
00000000	00000000	00000000	01000010	01101100	01110101
01100101	01110011	01010100	01000001	01001100	01000010
10001001	01010000	01001110	01000111	00001101	00001010
00011010	00001010	00000000	00000000	00000000	00001101
01001001	01001000	01000100	01010010	00000000	00000000
00000001	00101100	00000000	00000000	00000000	11001000
00001000	00000110	00000000	00000000	00000000	01010010
01010100	01101000	01100101	00100000	01000011	01100001
01110011	01101011	00100000	01101111	01100110	00100000
01000001	01101101	01101111	01101110	01110100	01101001
01101100	01101100	01100001	01100100	01101111	00001010
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- .txt

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01001111	01001110	00000000	00000000	00000000	00000110
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01100101	01110011	01010100	01000001	01001100	01000010
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00011010	00001010	00000000	00000000	00000000	00001101
01001001	01001000	01000100	01010010	00000000	00000000
00000001	00101100	00000000	00000000	00000000	11001000
00001000	00000110	00000000	00000000	00000000	01010010
01010100	01101000	01100101	00100000	01000011	01100001
01110011	01101011	00100000	01101111	01100110	00100000
01000001	01101101	01101111	01101110	01110100	01101001
01101100	01101100	01100001	01100100	01101111	00001010
01000101	01100100	01100111	01100001	01110010	00100000

Information Is Often Readable

- We use **Strings** to store readable data
 - Readable by ... you, or a computer
 - Find patterns, knowledge, information

```
>JX477166v1
CGGACACACAAAAAGAAAAAAGGTTTTTTAAGATTTTTTGTGTGCGAGTAACTATGAGGAAGATTAAACAG
TTTTCCTCAGTTTAAGGTATACACTGAAATTGAGATTGAGATTCTCCTCTTTGCTATTCTGTAACTTTCC
CTGGTTGTGACAATTGAATCAGTTTTATCTATTACCAATTACCATCAACATGGTATGTCTAGTGATCTTG
GGACTCTTCTTCATCTGGTTTTTCCTAGAGCTCTGAATCTATTTTGTGAGAAGTTCATCCAAACGACCCA

<div class="split-3-layout layout theme-base">
<h2 class="section-heading">
</h2>
<div class="column">
  <article class="story theme-summary"

cdatetime,address,district,beat,grid,crimedescr,ucr_ncic_code,latitude,longitude
1/1/06 0:00,2082 EXPEDITION WAY,5,5A,1512,459 PC BURGLARY RESIDENCE,2204,38.47350069,-121.4901858
1/1/06 0:00,4 PALEN CT,2,2A,212,10851(A)VC TAKE VEH W/O OWNER,2404,38.65784584,-121.4621009
1/1/06 0:00,22 BECKFORD CT,6,6C,1443,476 PC PASS FICTICIOUS CHECK,2501,38.50677377,-121.4269508
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CTGGTTGTGACAATTGAATCAGTTTTATCTATTACCAATTACCATCAACATGGTATGTCTAGTGATCTTG
GGACTCTTCTTCATCTGGTTTTTCCTAGAGCTCTGAATCTATTTTGTGAGAAGTTCATCCAAACGACCCA
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CTGGTTGTGACAATTGAATCAGTTTTATCTATTACCAATTACCATCAACATGGTATGTCTAGTGATCTTG
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CTGGTTGTGACAATTGAATCAGTTTTATCTATTACCAATTACCATCAACATGGTATGTCTAGTGATCTTG
GGACTCTTCTTCATCTGGTTTTTCCTAGAGCTCTGAATCTATTTTGTGAGAAGTTCATCCAAACGACCCA
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cdatetime,address,district,beat,grid,crimedescr,ucr_ncic_code,latitude,longitude
1/1/06 0:00,2082 EXPEDITION WAY,5,5A,1512,***,2204,38.47350069,-121.4901858
1/1/06 0:00,4 PALEN CT,2,2A,212,***,2404,38.65784584,-121.4621009
1/1/06 0:00,22 BECKFORD CT,6,6C,1443,***,2501,38.50677377,-121.4269508
```


Goals for Lesson



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- Learn about the Java **String** class
 - Details, idioms, programming experience
 - Common **String** methods
- Learn about Java types and operators
 - Numeric types and operators as well as **String**
 - **int** and **double** types
- Finding patterns and information
 - Searching, repeating, reasoning