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Computational Genomics Data Analysis

Problem Set 4 Exercise 1

1. Individuals 2 and 3 are unambiguous.
2. Unambiguous
 - a. Individual 2: 00010, 00011.
 - b. Individual 3: 01000
 - c. Start list is 01000, 00011, 00010
3. Ambiguous
 - a. Individual 1: 10111, 11110.
 - b. Individual 4: 01010, 11110.
 - c. Individual 5: 01000, 00010.
 - d. Necessary to add 11110, 10111, 11110 to list.

Work shown below:

(Ex)

Individual	1	2	3	4	5
Individual 1	11	10	11	11	10
Individual 2	00	00	00	11	10
Individual 3	00	11	00	00	00
Individual 4	10	11	10	11	00
Individual 5	00	01	00	01	00

1.1) 2 & 3 are unambiguous.

1.2) (Ind 2: 00010, 00011) (Ind 3: 01000)

1.3) Ind 1 11111

Ind 4 11110

Ind 5 01010

10110
11111
10111
11110
01010
11110
11010
01110
00000
01010
01000
00010

Known

List
01000
00011
00010
Add 11110
Add 10111
Add 11110