Alice takes last stone divides into 3 cases.

1. Alice took the 15th stone
   1. B 14
      1. A 13
         1. B 12
            1. A 11

B 10

A 9

B 8

A 7

A 6,7

A 5, 6, 7

B 7,8

A 6

A 5,6

A 4,5,6

B 6,7,8

A 5

A 4,5 -> B 3 & A 1,2 or B 2, 3 A1

A 3,4,5 -> B2 only since A 1

A 8, 9

B 7

B 6,7

B 5, 6,7

A 7, 8, 9

B 6

B 5,6

B 4,5,6

B 9, 10

A 8

A 7,8

A 6,7,8

B 8, 9, 10

A 7

A 6,7

A 5,6,7

* + - * 1. A 10, 11

B 9

B 8, 9

B 7,8,9

* + - * 1. A 9, 10, 11

B 8

B 7, 8

B 6, 7, 8

* + - 1. B 11, 12
      2. B 10, 11, 12
    1. A 12, 13
    2. A 11, 12, 13
  1. B 14, 13
  2. B 14, 13, 12

1. Alice took the 14th, 15th stone
2. Alice took the 13, 14, 15th stones