1. **Individuals 100 and 200 (PI\_HAT = 0.4787)**
   * Close relationship, possibly half-siblings or an aunt/uncle and niece/nephew.
2. **Individuals 100 and 300 (PI\_HAT = 0.4206)**
   * Significant relationship, likely in the same category as above.
3. **Individuals 100 and 400 (PI\_HAT = 0.2421)**
   * Less close relationship, perhaps first cousins or great-aunt/uncle and great-niece/nephew.
4. **Individuals 100 and 500 (PI\_HAT = 0.0000)**
   * No detectable genetic relationship (Z0 = 1.0000).
5. **Individuals 200 and 300 (PI\_HAT = 0.5195)**
   * Very close relationship, potentially full siblings or parent-child.
6. **Individuals 200 and 400 (PI\_HAT = 0.4641)**
   * Close relationship, similar to the first pair.
7. **Individuals 200 and 500 (PI\_HAT = 0.0000)**
   * No detectable genetic relationship.
8. **Individuals 300 and 400 (PI\_HAT = 0.2775)**
   * Less close relationship, possibly first cousins or great-aunt/uncle and great-niece/nephew.
9. **Individuals 300 and 500 (PI\_HAT = 0.0000)**
   * No detectable genetic relationship.
10. **Individuals 400 and 500 (PI\_HAT = 0.0000)**
    * No detectable genetic relationship.

A diagram of a diagram

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