

Let i, j, k denote the three numbers (instead of indices).

1. Enumerate all triples (i, j, k) . $O(U^3)$.
2. Wlog assume $i \mid (i + j + k)$. Enumerate i, j , then there are only $O(\frac{U}{i})$ choices for k . $O(\sum_{i=1}^U U \cdot \frac{U}{i}) = O(U^2 \log U)$.
3. Enumerate the sum $t = i + j + k$, find all divisors of t , then use inclusion-exclusion. $O(\sum_i d^2(i)) = O(U \log^3 U)$, where $d(\cdot)$ is the number of divisors function. <https://oeis.org/A061502>

Remark. the $d^2(i)$ part for counting the number of divisor triples that sum to t should be improvable.

References