Multiset Sum Problem

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Definition. Let be $\mathcal{U} \subset \mathbb{N}$ of cardinality $|\mathcal{U}| = n$ and let be $\tau \in [\min(\mathcal{U}), \kappa \sum \mathcal{U}]$, is there $\mathcal{V} \subset \mathbb{N}$ with $|\mathcal{V}| = n$ such that $\tau = \sum \mathcal{U}_i \mathcal{V}_i$

Example. $\tau = 54353013950$

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U = [26442626, 4384903, 5075850, 22171406, 28593934, 30120594, 7345044, 22418969, 3799329, 14985719, 27595429, 30002854, 7715751, 17307262,
     26294958, 12654126, 10227888, 33334328, 8660281, 11014841, 27221048, 10026300, 11635009, 26154691, 267333, 14418631, 18467528, 200780,
     18914127, 9827152, 16235090, 17866716, 11011933, 21830238, 29344225, 16930274, 24477539, 8574312, 14805227, 10756589, 32689133, 28476279,
     33331954, 6609780, 5889012, 19201015, 9113848, 18319226, 22328190, 23677183]
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Solution. 10 Solutions

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{267333: 4, 7715751: 2, 33334328: 1629, 11014841: 1, 200780: 1, 23677183: 1}
{33334328: 1629, 16235090: 1, 267333: 23, 14418631: 1, 9113848: 1, 5075850: 1, 200780: 2}
{6609780: 1, 267333: 9, 4384903: 1, 33334328: 1628, 17866716: 1, 7715751: 1, 200780: 2, 32689133: 1, 12654126: 1}
{3799329: 1, 6609780: 1, 267333: 6, 7715751: 2, 8574312: 1, 33334328: 1628, 4384903: 1, 32689133: 1, 11635009: 1}
{10227888: 1, 33334328: 1628, 5889012: 1, 267333: 9, 4384903: 2, 9113848: 1, 7715751: 2, 200780: 1, 32689133: 1}
{3799329: 1, 5889012: 1, 267333: 14, 7715751: 1, 33334328: 1628, 8660281: 1, 200780: 2, 32689133: 1, 21830238: 1}
{33334328: 1628, 6609780: 3, 267333: 34, 7715751: 1, 9113848: 1, 5889012: 1, 200780: 2, 32689133: 1}
{3799329: 1, 5889012: 1, 267333: 3, 7715751: 2, 33334328: 1628, 11014841: 1, 5075850: 1, 10026300: 1, 32689133: 1}
{3799329: 1, 16235090: 1, 5889012: 1, 30002854: 1, 4384903: 1, 9113848: 1, 10026300: 1, 5075850: 1, 200780: 1, 33334328: 1628}
{9827152: 1, 33334328: 1628, 267333: 47, 30002854: 1, 7715751: 1, 9113848: 1, 10026300: 1, 5075850: 1, 200780: 2}
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