Sunday, 21 August 2022 9:42 PM

Binary Search on Real world

So, you had been trying applying binary search on integer value range.

Binary search on real numbers (float / double) is a lot different from integer value.

Q. Given n ropes of different lengths.

$a[i] \rightarrow$ length of ith rope.

a[0] = 2
a[1] = 4
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a[957] = 969
a[958] = 970
a[959] = 971
a[960] = 972
a[961] = 973
a[962] = 974
a[963] = 975
a[964] = 976
a[965] = 977
a[966] = 978
a[967] = 979
a[968] = 980
a[969] = 981
a[970] = 982
a[971] = 983
a[972] = 984
a[973] = 985
a[974] = 986
a[975] = 987
a[976] = 988
a[977] = 989
a[978] = 990
a[979] = 991
a[980] = 992
a[981] = 993
a[982] = 994
a[983] = 995
a[984] = 996
a[985] = 997
a[986] = 998
a[987] = 999
a[988] = 1000
a[989] = 1001
a[990] = 1002
a[991] = 1003
a[992] = 1004
a[993] = 1005
a[994] = 1006
a[995] = 1007
a[996] = 1008
a[997] = 1009
a[998] = 1010
a[999] = 1011
a[1000] = 1012

So, you had been trying applying binary search on integer value range.

Binary search on real numbers (float / double) is a lot different from integer value.

Q. Given n ropes of different lengths.

$a[i] \rightarrow$ length of ith rope.