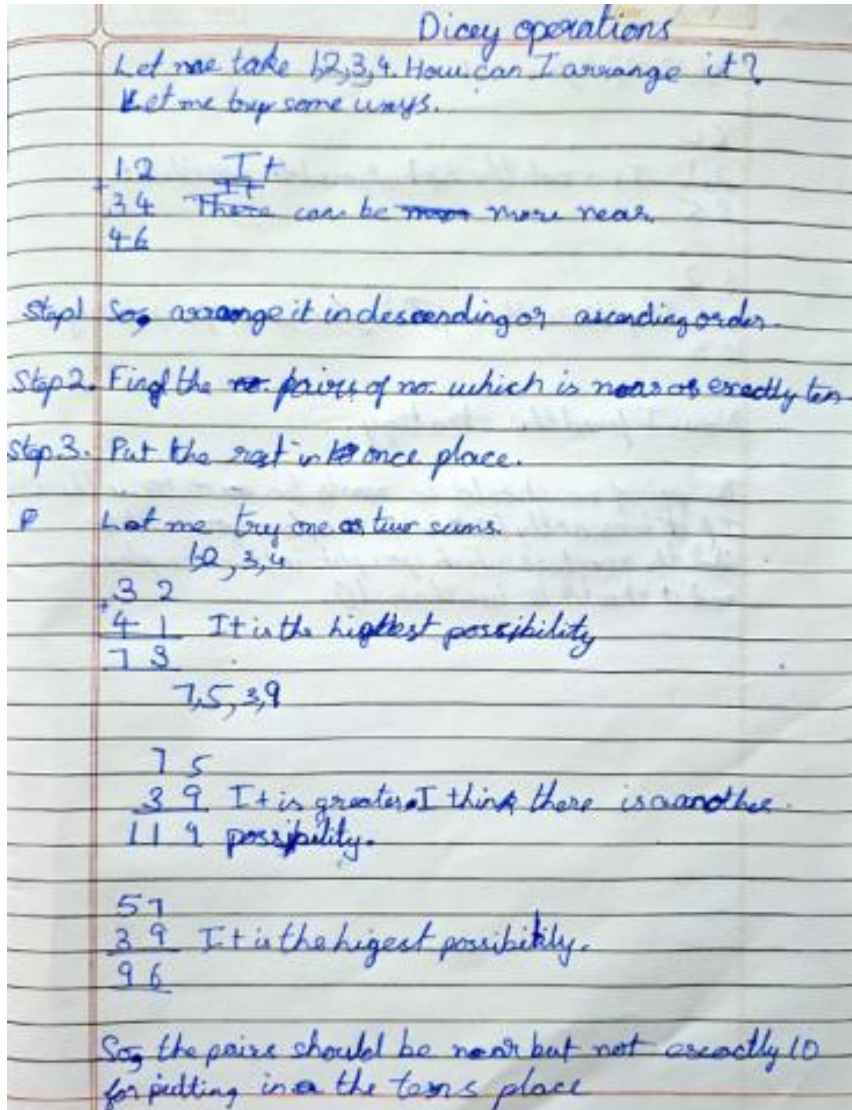


Hello NRICH team,

This is Shivaprasad from Chennai, India. I worked on the Dicey operations primary live problem (<https://nrich.maths.org/games/dicey-operations>) as part of STEPS IN MATH program by The GYM Foundation. Initially I took some numbers and found approach to get two 2-digit numbers whose total is closest to hundred. Later, I made a flowchart of the steps. Please find my work below.



Page: _____
Date: / /

4, 6, 12 = 12, 4, 6

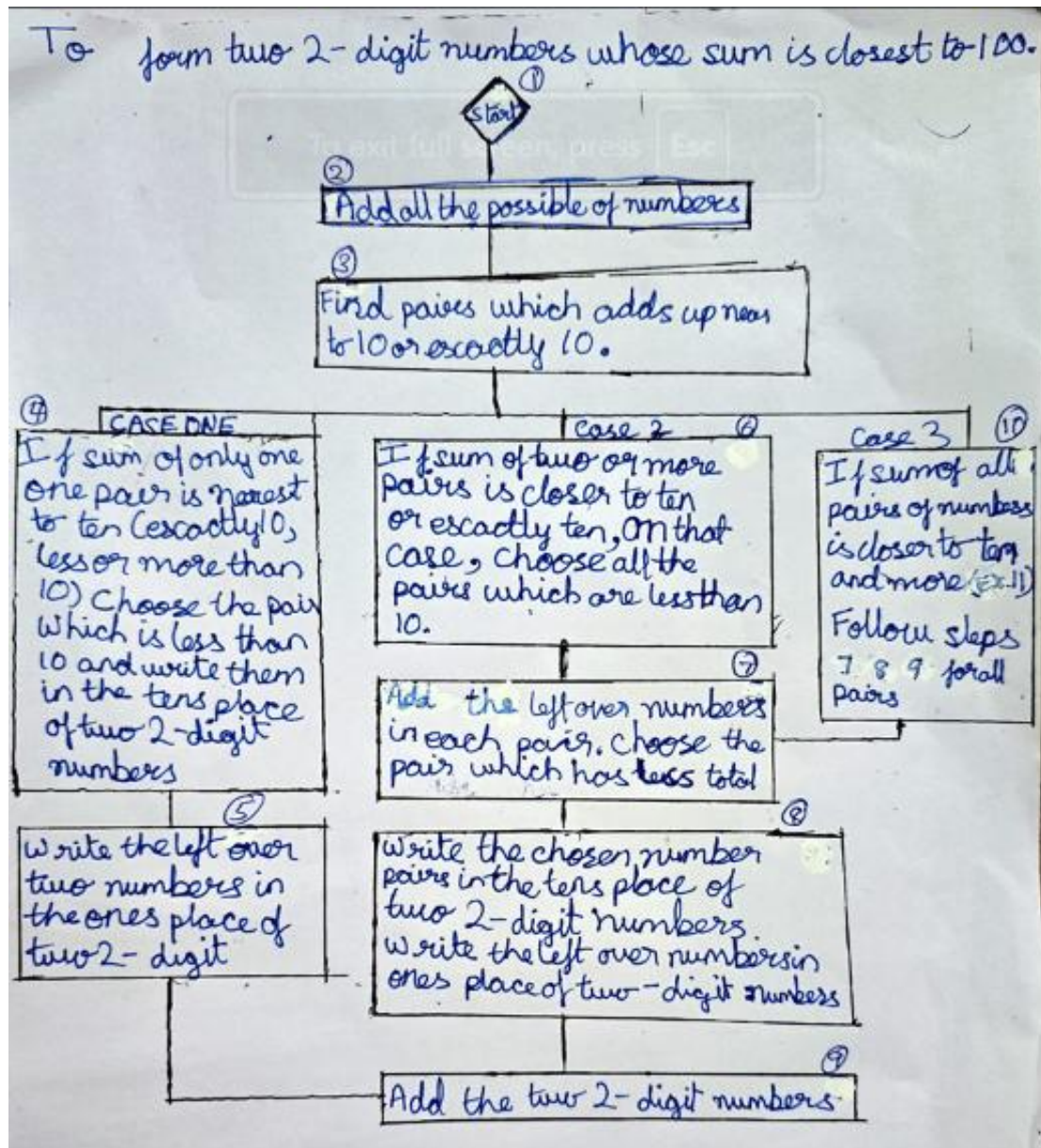
6 4
2 1 It's not the highest possible possibility
8 5

6 2
4 1 Why this is the ~~best~~ highest possible possibility
10 3

Now, I found the strategy.

The pair of no should be nearest to ten or less than ten in the tens place.
If it is exactly 10 then in the tens place you need to add the numbers which you put in the ones place and it should be less than 10.

Based on working on various possible number sets, found 3 possible cases and wrote the steps as a flowchart.



Case 1

6, 4, 2, 8

6+4=10

6+2=8

6+3=9

4+2=6

4+3=7

2+3=5

$\frac{64}{+32} = 96 \Rightarrow$ this follows
①, ②, ③, ④, ⑤, ⑥

Case 2

6, 3, 4, 5

6+3=9

6+4=10

6+5=11

3+4=7

3+5=8

4+5=9

$\frac{64}{+35} = 99 \Rightarrow$ This follows steps
①, ②, ③, ⑥, ⑦, ⑧, ⑨

Case 3

6, 5, 9, 2

6+5=11

6+9=15

6+2=8

5+9=14

5+2=7

9+2=11

$\frac{62}{+59} = 121 \Rightarrow$ This follows steps
①, ②, ③, ⑩, ⑪, ⑫, ⑬