

CODE AND OUTPUT - SECURIN

Part-A OUTPUT:

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PART-A - Question-1
Total Combinations: 36

PART-A - Question-2
All Possible Combination Pairs:
[1, 1],[1, 2],[1, 3],[1, 4],[1, 5],[1, 6],[2, 1],[2, 2],[2, 3],[2, 4],[2, 5],[2, 6],[3, 1],[3, 2],[3, 3],[3, 4],[3, 5],[3, 6],[4, 1],[4, 2],[4, 3],[4, 4],[4, 5],[4, 6],[5, 1],[5, 2],[5, 3],[5, 4],[5, 5],[5, 6],[6, 1],[6, 2],[6, 3],[6, 4],[6, 5],[6, 6],

Combinations Distribution:
2 3 4 5 6 7
3 4 5 6 7 8
4 5 6 7 8 9
5 6 7 8 9 10
6 7 8 9 10 11
7 8 9 10 11 12

PART-A - Question-3
Probabilities (in fraction format):
P(Sum = 2) = 1/36
P(Sum = 3) = 1/18
P(Sum = 4) = 1/12
P(Sum = 5) = 1/9
P(Sum = 6) = 5/36
P(Sum = 7) = 1/6
P(Sum = 8) = 5/36
P(Sum = 9) = 1/9
P(Sum = 10) = 1/12
P(Sum = 11) = 1/18
P(Sum = 12) = 1/36
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Part-B OUTPUT:

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PART-B- Answer
The new combination is:
New die_a: 1 2 2 3 3 4
New die_b: 1 3 4 5 6 8
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OUTPUT VERIFICATION:

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PART-A - Question-1
Total Combinations: 36

PART-A - Question-2
All Possible Combination Pairs:
[1, 1],[1, 3],[1, 4],[1, 5],[1, 6],[1, 8],[2, 1],[2, 3],[2, 4],[2, 5],[2, 6],[2, 8],[2, 1],[2, 3],[2, 4],[2, 5],[2, 6],[2, 8],[3, 1],[3, 3],[3, 4],[3, 5],[3, 6],[3, 8],[3, 1],[3, 3],[3, 4],[3, 5],[3, 6],[3, 8],[4, 1],[4, 3],[4, 4],[4, 5],[4, 6],[4, 8],

PART-A - Question-3
Combinations Distribution:
2 4 5 6 7 9
3 5 6 7 8 10
3 5 6 7 8 10
4 6 7 8 9 11
4 6 7 8 9 11
5 7 8 9 10 12

Probabilities (in fraction format):
P(Sum = 2) = 1/36
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P(Sum = 8) = 5/36
P(Sum = 9) = 1/9
P(Sum = 10) = 1/12
P(Sum = 11) = 1/18
P(Sum = 12) = 1/36
```