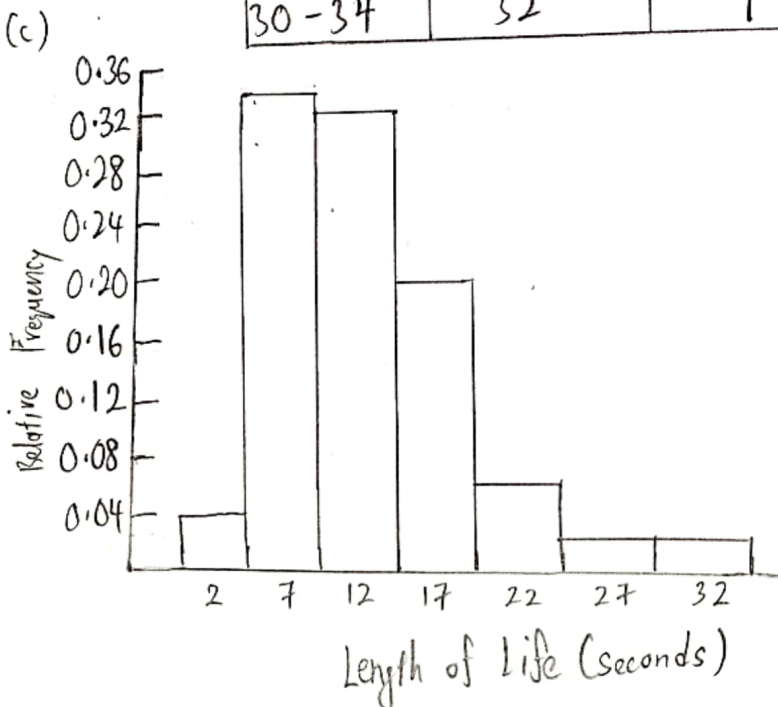


1.20) (a) Double-stem-and-Leaf Plot of life span of the fruit flies

Stem	Leaf	Frequency
0*	34	2
0.	5666777777889999	17
1*	0000001223333344	16
1.	5566788899	10
2*	034	3
2.	7	1
3*	2	1

(b) Relative Frequency Distribution

Class Interval	Class Midpoint	Frequency, f	Relative Frequency
0-4	2	2	0.04
5-9	7	17	0.34
10-14	12	16	0.32
15-19	17	10	0.20
20-24	22	3	0.06
25-29	27	1	0.02
30-34	32	1	0.02



$$\begin{aligned}
 (d) \quad \tilde{x} &= \frac{1}{2} (x_{25} + x_{26}) \\
 &= \frac{1}{2} (10 + 11) \\
 \therefore \tilde{x} &= 10.5 \text{ (seconds)}
 \end{aligned}$$

2.10) (a) $S = \{ FFF, NFF, FNF, FFN, NNF, NPN, FNN, NNN \}$

(b) $E = \{ FFF, NFF, FNF, FPN \}$

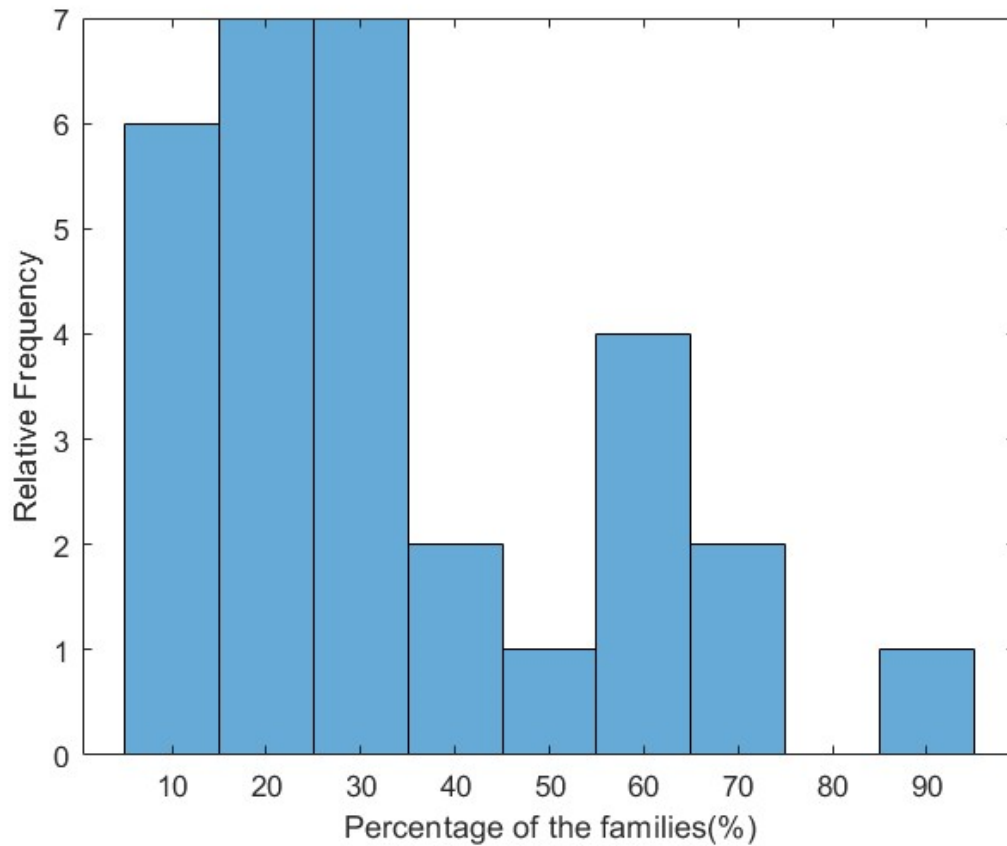
(c) The second river is safe for fishing.

2.20) (a) 6 (b) 2 (c) 2, 5, 6 (d) 4, 5, 7, 8

2.38) (a) $6! = 720$ (b) $3! \cdot 2^3 = 48$ (c) $3!3! = 36$

1.25)

(c)



(d) The result shows that the value of 10% trimmed mean is lower than the value of mean, but is higher than the value of the median. Due to the skewed distributions according to the histogram. Thus, it is necessary to calculate the 10% trimmed mean in order to help to reduce the effects of outliers on the calculated average.

1.30)

