Q1. given data D = {2200, 2500, 2600, 2700, 3000, 3200, 3500, 3600, 4000, 4200, 15000, 18000}

1. Ans
    a.
        i. Mean = SUM of D / N = 64500 / 12 = 5,375
        ii. Median = ½ (3200 + 3500) = 3,350
    b.
        i. Variance = 1/12 (305542,500)) = 25,461,875
        ii. Standard deviation = sq (variance) = 5,045.98
    c.
        i. 25^{th} percentile = 2,625
        ii. 50^{th} percentile = 3,350
        iii. 75^{th} percentile = 4,150
    d. IQR = 4150 – 2625 = 1,525
    e. Range = 18,000 – 2,200 = 15,800
2. Ans
    a. Because Mean is higher than Median, this tell me that the graph distribution is positive skewed
    b. Because Mean can be inflated by extreme data, in this case 15,000 and 18,000, while Median give us the middle of the income where half of the people have earned less and more
    c. From the IQR, the upper bound is 6,437.5 and the lower bound is 337.5. While the most values lies within 2,200 and 4,200 the incomes15,000 and 18,000 are outliers. Those values have effects on the mean and make graph positive skewed.