Q2.
Here's a dataset: [5, 3, 6, a, 3, 6, 9, b, 4, 1] Here a = 0 and b = 6.
You have to calculate & show steps:
1. Mean, Median, Mode
2. Interquartile Range
3. Check for outlier

Dataset = [5, 3, 6, 0, 3, 6, 9, 6, 4, 1]
1. **Mean = (5+3+6+0+3+6+9+6+4+1)/10 = 4.3**

    Median is the center most digit when the numbers are sorted.
    Sorted Dataset = [0, 1, 3, 3, 4, 5, 6, 6, 6, 9]

    If the number of elements is odd.
    Median = (n/2)th element

    If the number of elements is even
    Median = ((n/2)th + (n/2 + 1)th element)/2

    Here there are 10 elements, therefore
    Median = (5th element + 6th element) / 2
    **   = (4+5)/2 = 4.5**

    Mode is the element with highest frequency
    Mode = 6

2. **Interquartile range**
    The median of the first half of the sorted dataset is called as Q1 and the median of the second half is called as Q3.
    IQR = Q3 – Q1
    Sorted Dataset = [0, 1, 3, 3, 4, 5, 6, 6, 6, 9]
    Q1 = 3
    Q3 = 6
    IQR = 6-3 = 3

3. **Check for outliers**
    Any observations that are more than 1.5 IQR below Q1 or more than 1.5 IQR above Q3 are considered outliers.
    1.5(IQR) = 1.5 * 3 = 4.5
    Lower limit = 3 – 4.5 = -1.5
    Upper limit = 3 + 4.5 = 7.5

Therefore, only 9 is an outlier.

Q4.
Any comment on inflation in India compared to rest of the developed countries. You have to answer this using numbers or graphs. Basically you will have to show proper numbers to justify your stand.

Country	2021	2022
Australia	2.9 %	6.6 %
Morocco	1.4 %	6.7 %
Albania	2.0 %	6.7 %
Canada	3.4 %	6.8 %
Germany	3.1 %	6.9 %
South Africa	4.6 %	7.0 %
Finland	2.2 %	7.1 %
New Zealand	3.9 %	7.2 %
Denmark	1.9 %	7.7 %
Bangladesh	5.5 %	7.7 %
Ireland	2.4 %	7.8 %
Portugal	1.3 %	7.8 %
Mexico	5.7 %	7.9 %
United Kingdom	2.5 %	7.9 %
United States of America	4.7 %	8.0 %
Italy	1.9 %	8.2 %
Costa Rica	1.7 %	8.3 %
Iceland	4.4 %	8.3 %
Sweden	2.2 %	8.4 %
Spain	3.1 %	8.4 %
Austria	2.8 %	8.5 %
Armenia	7.2 %	8.6 %

Source: https://www.worlddata.info/inflation.php

Answer:

It can be seen that the inflation rate for the year of 2022 for most of the developed countries lies in the range of 6.5% to 8.5%. While that of India is 5.1%.

The possible reason is the fuel/energy rates. Most of the developed countries lies in the northern hemisphere of earth where there is a colder environment and there energy is majorly consumed for heaters. Which increases the demand of gas. Due to Ukraine-Russia war the fuel prices were at all time high causing higher inflation in developed countries. Moreover, India was fortunate enough to get the Russian oil at a discounted price and therefore inflation in India is a little lesser than these European countries.