

## Skewness

Following table contains the values of price variations of same product. Modify the given C program in such a way that the array **Price[i]** will be the input argument to a subfunction **calc\_skew**. Calculate the skewness of the price variations inside the function **calc\_skew**. The calculated skewness value will be returned to the main function. The skewness value will be printed in the main function. Formula for finding the skewness **skew** is given as follows.

S. No	Price
1	10
2	20
3	15
4	17
5	50
6	11
7	14
8	9
9	21
10	19

$$Skewness = \frac{\sum_{i=0}^{N-1} (Price[i] - \overline{Price})^3}{(N-1)S^3}$$

$\overline{Price}$  is the mean value of Price

Here,

S is the standard deviation of **Price**

$$S = \sqrt{\frac{\sum_{i=0}^{N-1} (Price[i] - \overline{Price})^2}{N}}$$

```
void main() {

    scanf("\n % d", Price[i]);

    // Find the skewness value skew using the given formula.

    printf("\n % d", skew);

    return 0;

}

void calc_skew() {

    // calculate skewness skew

}
```

Test case:

Input:

10

20

15

17

50

11

14

9

21

19

Output:

2.05