

Write a program that creates a list of 1 million random numbers between 1 and 100.

(Do not use a generator, as all the values will be needed at the same time. Create it as a normal list).

Create a function, `random_array(minimum, maximum, n)` which will create this list.

Find the mean, median, mode, variance and standard deviation of the data. Create functions for the above operations and call them.

Also, create another function, `check_normality(arr)` which will print the percentage of the data that has values between $m + s$ and $m - s$, where m is the mean and s is the standard deviation. Call this function as well on the data.

Hint:

The main body of the program is given below:

```
print("Computing...")
arr = random_array(1, 100, 1000000)
print("Mean = " + str(mean(arr)))
print("Median = " + str(median(arr)))
print("Mode = " + str(mode(arr)))
print("Variance = " + str(variance(arr)))
print("Standard deviation = " + str(standard_dev(arr)))
check_normality(arr)
print("Done!")
```

Implement all the functions listed above.