// documentation for sinogaya_header.h

```
/**
   *~~Function to input an array from the user.
    *~~param array Pointer to the array where the input will be stored.
   *~~param size The size of the array.
 */
```

#define void inputArray(int *array, int size);

```
/**
 * ~~Function to calculate the mean of an array.
 * ~~param array Pointer to the array of integers.
 * ~~param size The size of the array.
 * ~~return The mean of the array as a double.
 */
```

#define double calculateMean(int *array, int size);

```
/**
 * ~~Function to calculate the median of an array.
 * ~~param array Pointer to the array of integers.
 * ~~param size The size of the array.
 * ~~return The median of the array as a double.
 */
```

#define double calculateMedian(int *array, int size);

```
/**
 * ~~Function to calculate the mode of an array.
 * ~~param array Pointer to the array of integers.
 * ~~param size The size of the array.
 * ~~return The mode of the array as an integer. Returns -1 if no mode is found.
 */
#define int calculateMode(int *array, int size);

/**
 * ~~Function to calculate the variance of an array.
 * ~~param array Pointer to the array of integers.
 * ~~param size The size of the array.
 * ~~param mean The mean of the array.
 * ~~return The variance of the array as a double.
 */
#define double calculateVariance(int *array, int size, double mean);

/**
 * ~~Function to calculate the standard deviation of an array.
 * ~~param variance The variance of the array.
 * ~~return The standard deviation of the array as a double.
 */
#define double calculateStandardDeviation(double variance);

#endif
```