```c
#include <stdio.h>
#include <math.h>
#define MAXSIZE 3000
int main(){
    int  i, flag, k;
    float new_arr_num = 0;
    float average, variance, std_deviation, sum = 0, sq_sum = 0, var_sum = 0;
/*  Compute the sum of prime elements between 0 and 3000*/
    for(i = 0; i <= MAXSIZE; i++){
        flag = 0;
        for(k = 1; k <= i; k++){
            if(i % k == 0){
                flag = flag + 1;
            }
        }
        if(flag == 2){
            sum += i;
            sq_sum += pow(i, 2);
            new_arr_num++;
        }
    }
    average = (sum) / (new_arr_num);
/*  Compute  variance  and standard deviation of prime numbers between 0 and 3000*/
    var_sum = (sq_sum) / (new_arr_num);
    variance = (var_sum) - pow(average, 2);
    std_deviation = sqrt(variance);
    printf("\n\t\tThe computations of primes between 0 and 3000 are as below:\n\n");
    printf("\t------------------------------------------------------------------------\n");
    printf("\nAverage of all elements = %.2f\n\n", average);
    printf("variance of all elements = %.2f\n\n", variance);
    printf("Standard deviation = %.2f\n\n", std_deviation);
    return 0;
}
```