REPORT FOR 0X04 DIRECTORY!!
Date:17th June,2022
Time: 10:45 pm

Objectives: loops and arrays a product is calculated and the values are assigned to a data array and the total is calculated.

I started by including a standard input output header file using the #include <stdio.h>
Then we defined an expression TOTAL_SIZE to be 20 using the #define directive
in the main() function, we are using an input integer data[TOTAL_SIZE]; ,total ,i ,j and product variables, we then initialized total to 0.
then we then used a for loop to initialize i and do a comparison with TOTAL_SIZE; then we incremented I. Inside the code block we run an iteration , product = i * TOTAL_SIZE, we multiply i and TOTAL_SIZE and assign the value to the product,
.data[i] = product, here we then assign the value of product to data[i] array

then we add the total to the product and assign the value to total.
We then declare a floating point avg variable.
we initialized avg to (total / TOTAL_SIZE),we then will take total and divide it with TOTAL_SIZE and then assign the value to avg.
printf("Average is: %f \n", avg);.will print the Average.
another for loop was used to initialize (j = TOTAL_SIZE; and if j > 0; we minus j--;
in the code block if j which is initialized to 20 is grater than 0,we use printf("The Element at %d ",j); to print the element in decreasing order. Then prinft("is : %d\n", data[j]);.This will print the current value stored in the date[j] array .return 0; will exit the program successfully.