

REPORT FOR 0X04 DIRECTORY!!

Date:18th June,2022

Time: 10:24 pm

Ojective: 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 if the condition was true, then `product = i * TOTAL_SIZE`, we are saving product of i and `TOTAL_SIZE`

.`data[i] = product`, here we then put the value of the product into `data[i]` then we add total to product and save at 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.

we.`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--`;

since this condition was true ,we move to the code block and use `printf("The Element at %d ",j)`; to print the element in decreasing order. then `printf("is : %d\n", data[j])`;This will print the number saved in index of `data[j]`.`return 0`; will exit the program successfully.