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Std: SE Div: A

Roll no.:32

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**PROGRAM:**

section .data

msg db "The average of sum of array is: ",10

msglen: equ $-msg

msg1 db "",10

msg1len: equ $-msg1

abc dw 1111h,1111h,1111h,1111h

count db 04h

section .bss

avrg resw 1

dispnum resb 8

result resw 1

%macro avg 4

mov eax,%1

mov ebx,%2

mov ecx,%3

mov edx,%4

int 80h

%endmacro

section .text

global \_start

\_start:

mov esi,abc

XOR edi,edi

mov edi,04h

XOR eax,eax

XOR ebx,ebx

clc

cont: add ax,[esi]

add esi,2

dec edi

jnz cont

mov [result],ax

avg 4,1,msg,msglen

xor edx,edx

xor eax,eax

mov eax,[result]

mov ebx,04h

div ebx

call disp

avg 4,1,msg1,msg1len

exit: mov eax,1

mov ebx,0

int 80h

disp: mov esi,dispnum+7

xor ecx,ecx

mov edi,8

cnt: mov edx,0

mov ebx,10h

div ebx

cmp dl,09h

jbe skip

add dl,07h

skip: add dl,30h

mov [esi],dl

dec esi

dec edi

jnz cnt

avg 4,1,dispnum,8

ret

**OUTPUT :**

[student@localhost ~]$ nasm -f elf64 average.asm -o average.o

[student@localhost ~]$ ld -o average average.o

[student@localhost ~]$ ./average

The average of sum of array is:

00001111

[student@localhost ~]$