**WAQAR AHMED**

**20P-0750**

**Lab-Report 09**

**PASSING PARAMETER TO THE FUNCTION THROUGH STACK:**

[org 0x0100]

jmp main

parameter : dw 5

FactorialFunction:

push bp

mov bp, sp

push ax

push cx

mov ax, [bp+4]

mov cx, ax

Factoriallogic:

sub cx, 1

mul cx

cmp cx, 1

jne Factoriallogic

mov di, ax

pop cx

pop ax

pop bp

ret 2

sum:

push bp

mov bp, sp

sub sp, 6

push ax

push bx

push cx

push dx

push si

push di

mov dx, [bp+4]

add dx, 1

mov si, 0

Series:

mov ax, si

mov cx, 2

div cl

cmp ah, 0

jne find

mov word[bp-2], 1

jmp Noswap

find:

mov word[bp-2], -1

Noswap:

mov ax, si

mul cl

add ax, 1

push ax

call FactorialFunction

pop ax

mov [bp-4], di

mov ax, [bp-2]

mov cx, [bp-4]

div cl

add [bp-6], ax ; Moving the sum of series in the local variable

add si, 1

cmp dx, si

jne Series

pop di

pop si

pop dx

pop cx

pop bx

pop ax

add sp, 6

pop bp

ret 2

main:

push word[parameter]

call sum

mov ax, 0x4c00

int 0x21