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LAB-REPORT-9

Content of lab 9: Passing parameter to function

I have create a function which will take the parameters one is name second the location where we want to print and the third parameter will be the length of the string.....Basically the parameters that we push are actually pushed in stack and in the subroutine we use bp parameter in the subroutine to acess the parameters

```
[org 0x0100]  
jmp start
```

```
name : dw "Shoaib Akhtar"  
nameLength: dw 13  
caste: dw "Babar"  
casteLength: dw 5
```

```
clrscr:
```

```
push ax  
push es  
push di
```

```
mov ax, 0xb800  
mov es, ax  
mov di, 0
```

```
l1:  
    mov word [es:di], 0x0720  
    add di, 2
```

```
    cmp di, 4000
    jne l1
```

```
pop di
pop es
pop ax
```

```
ret
```

printname:

```
    push bp
    mov bp, sp
    push ax
    push bx
    push cx
    push dx
    push si
    push di
    push es
```

```
    mov ax, 0xb800
    mov es, ax
    mov di, 0
```

```
    mov si, [bp+8] ; parameter of string
    mov di, [bp+6] ; location where we want to print
    mov cx, [bp+4]
```

```
    mov al, 0x02
```

l10:

```
    mov dl, [si]

    mov word[es:di], dx

    add di, 2
```

add si, 1

loop l10

pop es

pop si

pop di

pop dx

pop cx

pop bx

pop ax

pop bp

ret 6

printname1:

push bp

mov bp, sp

push ax

push bx

push cx

push dx

push si

push di

push es

mov ax, 0xb800

mov es, ax

mov di, 1992

mov dh, 0x01

mov si, [bp+6]

mov cx, [bp+4]

l3:

```
mov dl, [si]
```

```
mov word[es:di], dx
```

```
add di, 2
```

```
add si, 1
```

```
loop l3
```

```
pop es
```

```
pop si
```

```
pop di
```

```
pop dx
```

```
pop cx
```

```
pop bx
```

```
pop ax
```

```
pop bp
```

```
ret 4
```

```
start:
```

```
call clrscr
```

```
mov ax,1234
```

```
push ax
```

```
; This function will print the numbers that we will pass as a parameter
```

```
; pushing parameters name and di location and length of the string
```

```
push name
```

```
push 0  
push word[nameLength]
```

```
call printname
```

```
push caste  
push 30 ; this is the value of di where i want to print  
push word[casteLength]
```

```
call printname
```

```
;These are the parameters that we will push
```

```
mov ah, 0x01  
int 0x21
```

```
mov ax, 0x4c00  
int 0x21
```

DOSBox 0.74-3, Cpu speed: 3000 cycles, Frameskip 0, Program: PRINTNUM -



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