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20P-0147

LAB-REPORT-10

Content of lab 10: Printing

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

```
rollNo : dw "20P-0147"  
length: dw 8
```

```
; Subroutine that will clear screen of the dosbox
```

```
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
```

; ; Subroutine that will Print the Roll no on the dosbox screen

```
printRollNO:
```

```
    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]
```

```
l2:
```

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

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

```
add di, 2
```

```
add si, 1
```

```
loop l2
```

```
pop es
```

```
pop si
```

```
pop di
```

```
pop dx
```

```
pop cx
```

```
pop bx
```

```
pop ax
```

```
pop bp
```

```
ret 4
```

```
start:
```

```
call clrscr
```

```
; pushing parameters
```

```
mov ax, rollNo
```

```
push ax
```

```
push word[length]
```

```
call printRollNO
```

```
mov ah, 0x01
```

```
int 0x21
```

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

OUTPUT

