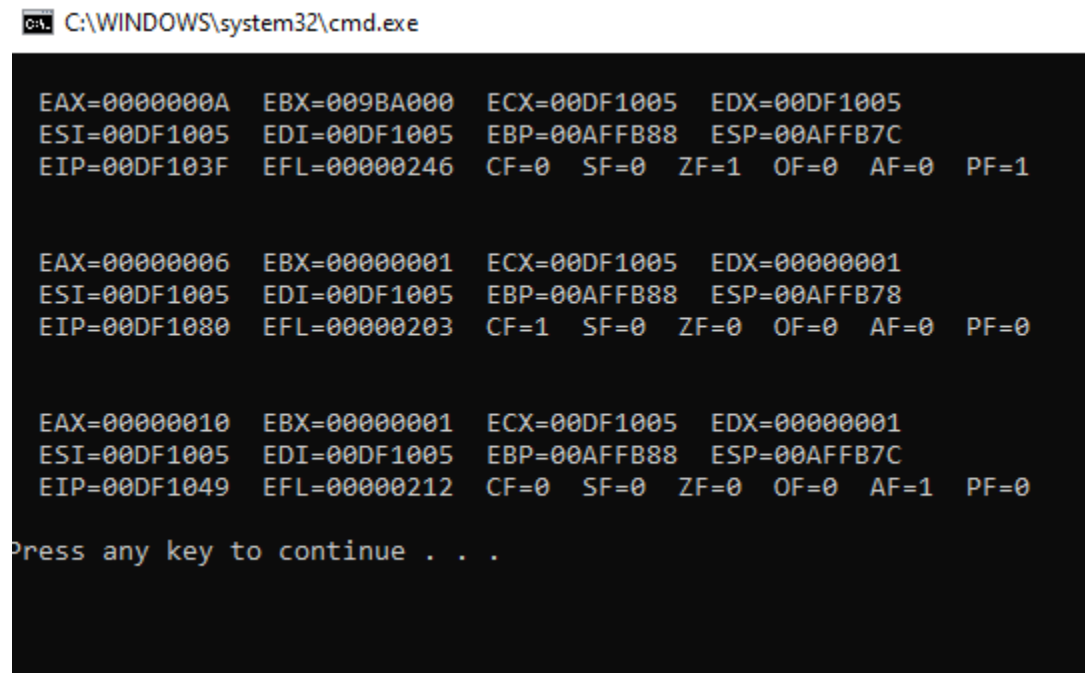| Name	:	Ibadullah Shaikh
Roll No	:	19k-0259
Section	:	BCS-3G
Course	:	COAL Assignment # 02

Code:

```
INCLUDE Irvine32.inc
.code
main PROC
mov eax, 0
mov eax, 00001010b
call DumpRegs
call Encryption                         ;calling encryption PROC
call DumpRegs
exit
main ENDP

Encryption PROC
      add eax, 5
      add eax, 2
      sub eax, 4
      rol eax, 3
      test eax, 00000001b
      jnz one
      SHR eax, 1
      mov ebx, 1
      one:
      test eax, 10000000b
      jnz two
      SAR eax, 1
      mov edx, 1
      two:
      RCR eax, 2
      call DumpRegs
      call Dycryption                   ;calling dycryption PROC
      RET
Encryption ENDP

Dycryption PROC
      RCL eax, 2
      cmp edx, 1
      jz three
      jnz four
      three:
      SAL eax, 1
      four:
      cmp ebx, 1
      jz five
      jnz six
      five:
```

```
        SHL eax, 1
        six:
        ROR eax, 3
        sub eax, 4
        add eax, 2
        add eax, 5
        RET
Dycryption ENDP
END main
```

Screenshot: