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Assignment-9

1-> Program to multiply signed 16-bit numbers.

Code:-

model small

.8086

.data

a dw 0004H

b dw -0002H

c dw 0

d dw 0

.code

mov ax, @data

mov ds, ax

mov ax, a

mov bx, b

imul bx

mov c, ax

mov d, dx

mov ax, 4C00H

int 21h

end

```
076A:0003 8ED8
                           MOV
                                    DS,AX
                                    AX,[000A]
BX,[000C]
076A:0005 A10A00
076A:0008 8B1E0C00
                           MOV
                           MOV
076A:000C F7EB
                           IMUL
                                    BX
076A:000E A30E00
076A:0011 89161000
                                    [000E],AX
[0010],DX
                           MOV
                           MOV
076A:0015 B8004C
                           MOV
                                    AX,4C00
076A:0018 CDZ1
                           INT
                                    21
076A:001A 0400
                                    AL,00
                           ADD
076A:001C FEFF
                                    [BX+SI],AL
076A:001E 0000
                           ADD
Program terminated normally
-d 076B:0000
076B:0000 00 89 16 10 00 B8 00 4C-CD 21 04 00 FE FF F8 FF 076B:0010 FF FF 00 80 0E 10 00 02-00 80 0E 00 00 00 00 81
076B:0060
                FF FF FF FF FF FF-FF FF FF
                                                     FF FF FF
                                                 \mathbf{F}\mathbf{F}
                                                                     ...&......
076B:0070 FF FF FF 26 00 FF FF FF-FF FF FF FF
```

2-> Program to multiply unsigned 16-bit numbers. **Code:**-

model small

.8086

.data

a dw 0004H

b dw 0FFFEH

c dw 0

d dw 0

.code

mov ax, @data

mov ds, ax

mov ax, a

mov bx, b

mul bx

mov c, ax

mov d, dx

mov ax, 4C00H int 21h

end

```
AX,076B
076A:0000 B86B07
                 MOV
076A:0003 8ED8
                 MOV
                       DS,AX
                       AX,[000A]
076A:0005 A10A00
                 MOV
                       BX,[000C]
076A:0008 8B1E0C00
                 MOV
076A:000C F7E3
                       BX
                 MUL
076A:000E A30E00
                 MOV
                       [000E],AX
076A:0011 89161000
                       [0010],DX
                 MOV
076A:0015 B8004C
                 MOV
                       AX,4000
076A:0018 CD21
                 INT
                       AL,00
076A:001A 0400
                 ADD
076A:001C FEFF
                       BH
076A:001E 0000
                 ADD
                       [BX+SI],AL
Program terminated normally
-d 076B:0000
076B:0000 00 89 16 10 00 B8 00 4C-CD 21 04 00 FE FF F8 FF
                                            076B:0010 03 00 00 80 0E 10 00 02-00 80 0E 00 00 00 00 81
076B:0060
076B:0070
       FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
                                            . . . & . . . . . . . . . . . .
```

3-> Program for division of unsigned 8-bit numbers.

Code:-

model small

.8086

.data

a db 28H

b db 03H

c dw?

.code

mov ax, @data

mov ds, ax

mov ax,0000H

mov bx,0000H

mov al,a

mov bl,b

div bl

mov c,ax

mov ax, 4C00H

int 21h

end

```
076A:0003 8ED8
                MOV
                      DS,AX
                     AX,0000
076A:0005 B80000
                MOV
                      BX,0000
076A:0008 BB0000
                MOV
                      AL,[000C]
076A:000B A00C00
                MOV
                      BL,[000D]
076A:000E 8A1E0D00
076A:0012 F6F3
                MOV
                DIU
                      BL
076A:0014 A30E00
                      [000E],AX
                MOV
076A:0017 B8004C
                MOV
                      AX,4C00
076A:001A CD21
                INT
                      21
076A:001C 2803
                SUB
                      [BP+DI],AL
076A:001E 0E
                PUSH
076A:001F 0000
                      [BX+SI],AL
                ADD
Program terminated normally
-d 076B:0000
....L.!(...
076B:0010 00 00 00 80 0E 10 00 02-00 80 0E 00 00 00 00 81
076B:0070 FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
```

4-> Program for division of unsigned 16-bit numbers.

Code:-

model small

.8086

.data

a dw 0188H

b dw 0012H

c dw?

d dw?

.code

mov ax, @data

mov ds, ax

mov ax,0000H

mov bx,0000H

mov dx,0000H

mov ax,a

mov bx,b

div bx

mov c,ax

mov d,dx

mov ax, 4C00H int 21h

end

```
076A:0000 B86C07
                   MOV
                         AX,076C
076A:0003 BED8
                   MOV
                         DS,AX
076A:0005 B80000
                         AX,0000
                   MOV
076A:0008 BB0000
                   MOV
                         BX,0000
076A:000B BA0000
                   MOV
                         DX,0000
076A:000E A10400
076A:0011 8B1E0600
                         AX,[0004]
BX,[0006]
                   MOV
                   MOV
076A:0015 F7F3
                   DIV
                         [0008],AX
076A:0017 A30800
                   MOV
076A:001A 89160A00
                         [000A],DX
                   MOV
076A:001E B8004C
                   MOV
                         AX,4C00
Program terminated normally
-d 076B:0000
076B:0000 00 8B 1E 06 00 F7 F3 A3-08 00 89 16 0A 00 B8 00
                                                076B:0010 4C CD 21 00 88 01 12 00-15 00 0E 00 00 00 00 81
076B:0030
        \mathbf{F}\mathbf{F}
076B:0040
076B:0060
        FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
076B:0070
                                                . . . & . . . . . . . . . . . .
```

5-> Program for division of signed 8-bit numbers.

Code:-

model small

.8086

.data

a db 28H

b db -03H

c dw?

.code

mov ax, @data

mov ds, ax

mov ax,0000H

mov bx,0000H

mov al,a

mov bl,b

idiv bl

mov c,ax

mov ax, 4C00H

int 21h

end

```
076A:0003 8ED8
                 MOV
                       AX,0000
076A:0005 B80000
                 MOV
076A:0008 BB0000
                 MOV
                       BX,0000
                       AL,[000C]
                 MOV
076A:000B A00C00
076A:000E 8A1E0D00
                 MOV
                       BL,[000D]
076A:0012 F6FB
                 IDIU
                       BL
076A:0014 A30E00
                 MOV
                       [000E],AX
076A:0017 B8004C
                 MOV
                       AX,4000
076A:001A CD21
                 INT
076A:001C 28FD
                 SUB
                       CH, BH
076A:001E 0E
                 PUSH
                       CS
076A:001F 0000
                       [BX+SI],AL
Program terminated normally
-d 076B:0000
076B:0000 OD 00 F6 FB A3 OE 00 B8-00 4C CD 21 28 FD F3 01
                                            ....L.!(...
076B:0010 00 00 00 80 0E 10 00 02-00 80 0E 00 00 00 00 81
076B:0070 FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
                                            . . . & . . . . . . . . . . . .
```

6-> Program for division of signed 16-bit numbers.

Code:-

model small

.8086

.data

a dw 0188H

b dw -0012H

c dw?

d dw?

.code

mov ax, @data

mov ds, ax

mov ax,0000H

mov bx,0000H

mov dx,0000H

mov ax,a

mov bx,b

idiv bx

mov c,ax

mov d,dx

mov ax, 4C00H

int 21h

end

```
076A:0000 B86C07
                  MOV
                         AX,076C
076A:0003 8ED8
                  MOV
                        DS,AX
076A:0005 B80000
                        AX,0000
                  MOV
                        BX,0000
DX,0000
076A:0008 BB0000
                  MOV
076A:000B BA0000
                  MOV
                        AX,[0004]
076A:000E A10400
                  MOV
076A:0011 8B1E0600
                  MOV
                         BX,[0006]
076A:0015 F7FB
                        BX
                  IDIV
076A:0017 A30800
                  MOV
                         [0008],AX
                  MOV
076A:001A 89160A00
                         [000A],DX
076A:001E B8004C
                  MOV
                        AX,4C00
Program terminated normally
-d 076B:0000
076B:0000 00 8B 1E 06 00 F7 FB A3-08 00 89 16 0A 00 B8 00
076B:0010 4C CD 21 00 88 01 EE FF-EB FF 0E 00 00 00 00 81
                                               FF FF
076B:0060
        FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF
076B:0070
                                               . . . & . . . . . . . . . . . .
```

7-> Program for data transfer using different addressing modes.

Code:-

model small

.8086

.data

s1 db "UVWXYZ\$"

s2 db "ABCDEF\$"

.code

mov ax, @data

mov ds, ax

mov ah,15h

mov bh,al

mov di,offset s1

mov bl,[di]

mov ax,[0012h]

mov si, offset s2

mov dl,[si+2]

in ax , 50H

mov ax, 4C00H

int 21h

end

DS=075A ES=075A	CX=002C DX=0000 SP=0000 SS=0769 CS=076A IP=0003 MOV DS,AX	
DS=076B ES=075A	CX=002C DX=0000 SP=0000 SS=0769 CS=076A IP=0005 MOV AH,15	
DS=076B ES=075A	CX=002C DX=0000 SP=0000 SS=0769 CS=076A IP=0007 MDV BH,AL	
DS=076B ES=075A	CX=002C DX=0000 SP=0000 SS=0769 CS=076A IP=0009 MDV DI,000E	
	CX=002C DX=0000 SP=0000 SS=0769 CS=076A IP=000C MOV BL,[DI]	

```
AX=156B BX=6B55 CX=002C DX=0000 SP=0000 BP=0000 SI=0000 DI=000E
DS=076B ES=075A SS=0769 CS=076A IP=000E
                                           NV UP EI PL NZ NA PO NC
076A:000E B81200
                      MOV
                              AX,001Z
AX=0012 BX=6B55 CX=002C DX=0000 SP=0000 BP=0000 SI=0000 DI=000E
DS=076B ES=075A SS=0769 CS=076A IP=0011
                                           NU UP EI PL NZ NA PO NC
076A:0011 BE1500
                      MOV
                              SI,0015
AX=0012 BX=6B55 CX=002C DX=0000 SP=0000 BP=0000 SI=0015 DI=000E
DS=076B ES=075A SS=0769 CS=076A IP=0014
                                          NU UP EI PL NZ NA PO NC
076A:0014 8A5402
                      MOV
                              DL,[SI+02]
                                                               DS:0017=43
AX=0012 BX=6B55 CX=002C DX=0043 SP=0000 BP=0000 SI=0015 DI=000E
DS=076B ES=075A SS=0769 CS=076A IP=0017
                                           NV UP EI PL NZ NA PO NC
076A:0017 E550
                              AX,50
                      IN
AX=00FF
        BX=6B55 CX=002C DX=0043 SP=0000 BP=0000 SI=0015 DI=000E
DS=076B ES=075A
                SS=0769 CS=076A IP=0019
                                           NV UP EI PL NZ NA PO NC
076A:0019 B8004C
                      MOV
                              AX,4C00
```

8-> Program to move data from source to destination using indirect addressing mode (Block Move without overlap).

```
Code:-
model small
.8086
.data
s1 db "UVWXYZ$"
s2 db 6 dup(0)
.code
mov ax, @data
mov ds, ax
mov si,offset s1
mov di,offset s2
mov cx,0006h
up: mov al,[si]
  mov [di],al
  inc si
  inc di
  dec cx
  jnz up
```

mov ax, 4C00H int 21h end

Output:-

```
076A:0010 8805
                                                   MOV
                                                                    [DI],AL
076A:001Z 46
                                                   INC
                                                                   SI
076A:0013 47
                                                                    DI
                                                   INC
                                                                   CX
076A:0014 49
                                                   DEC
076A:0015 75F7
                                                   JNZ
                                                                   000E
076A:0017 B8004C
                                                  MOV
                                                                   AX,4C00
076A:001A CD21
                                                   INT
                                                                   21
                                                                    BP
076A:001C 55
                                                   PUSH
                                                                   SI
076A:001D 56
                                                   PUSH
                                                   PUSH
                                                                    DI
076A:001E 57
076A:001F 58
                                                  POP
                                                                   ΑX
-\mathbf{g}
Program terminated normally
-d 076B:000C
                                                                                                                                                           UUWX
076B:0000
                                                                                                    55 56 57 58
                       59 5A 24 55 56 57 58 59-5A 80 0E 00 00 00 00 81
                                                                                                                                  YZ$UVWXYZ.....
076B:0010
                       OE FF FF
                                         FF
                                                FF FF
                                                             \mathbf{F}\mathbf{F}
076B:0020
                                                                   FF-FF FF
                                                                                       \mathbf{F}\mathbf{F}
                                                                                             \mathbf{F}\mathbf{F}
                                                                                                   \mathbf{F}\mathbf{F}
                                                                                                         \mathbf{F}\mathbf{F}
                                                                                                                FF FF
                       FF FF FF
                                          \mathbf{F}\mathbf{F}
                                                \mathbf{F}\mathbf{F}
                                                      \mathbf{F}\mathbf{F}
                                                             \mathbf{F}\mathbf{F}
076B:0030
                                                                   FF-FF
                                                                                \mathbf{F}\mathbf{F}
                                                                                       \mathbf{F}\mathbf{F}
                                                                                             \mathbf{F}\mathbf{F}
                                                                                                   \mathbf{F}\mathbf{F}
                                                                                                         \mathbf{F}\mathbf{F}
                                                                                                                FF FF
                                   \mathbf{F}\mathbf{F}
                                          \mathbf{F}\mathbf{F}
                                                \mathbf{F}\mathbf{F}
                                                      \mathbf{F}\mathbf{F}
                                                             \mathbf{F}\mathbf{F}
076B:0040
                       FF FF
                                                                   FF-FF
                                                                                \mathbf{F}\mathbf{F}
                                                                                       \mathbf{F}\mathbf{F}
                                                                                             \mathbf{F}\mathbf{F}
                                                                                                   \mathbf{F}\mathbf{F}
                                                                                                         \mathbf{F}\mathbf{F}
                                                                                                                FF FF
                                   \mathbf{F}\mathbf{F}
                                          \mathbf{F}\mathbf{F}
                                                \mathbf{F}\mathbf{F}
                                                      \mathbf{F}\mathbf{F}
                                                             \mathbf{F}\mathbf{F}
                                                                                       \mathbf{F}\mathbf{F}
076B:0050
                       FF FF
                                                                   FF-FF
                                                                                \mathbf{F}\mathbf{F}
                                                                                             \mathbf{FF}
                                                                                                   \mathbf{F}\mathbf{F}
                                                                                                         \mathbf{F}\mathbf{F}
                                                                                                                FF FF
076B:0060
                       FF FF
                                   \mathbf{F}\mathbf{F}
                                         \mathbf{F}\mathbf{F}
                                                \mathbf{F}\mathbf{F}
                                                      \mathbf{F}\mathbf{F}
                                                             \mathbf{F}\mathbf{F}
                                                                   FF-FF
                                                                                \mathbf{F}\mathbf{F}
                                                                                       \mathbf{F}\mathbf{F}
                                                                                             \mathbf{F}\mathbf{F}
                                                                                                   FF FF FF FF
                       FF FF FF 26 00 FF
                                                             \mathbf{F}\mathbf{F}
                                                                   FF-FF FF
                                                                                       \mathbf{F}\mathbf{F}
                                                                                             FF FF FF FF
076B:0070
                                                                                                                                  . . . & . . . . . . . . . . . .
076B:0080
                      FF FF FF FF FF FF FF-FF FF
                                                                                      \mathbf{F}\mathbf{F}
```

9-> Program to move a block of data from source to destination (With overlap in either direction.

```
Code:-
model small
.8086
.data
s1 db "UVWXYZ$"
.code
mov ax, @data
mov ds, ax
mov si,offset s1
mov cx,0006h
mov bl,05h
mov di,offset [s1+3]
  up: inc si
    inc di
    dec bl
    jnz up
```

```
go: mov al,[si]
mov [di],al
dec si
dec di
dec cx
jnz go
mov ax, 4C00H
int 21h
end
```

Before :-

```
976A:0008 B90600
                      CX,0006
076A:000B B305
                MOV
                      BL,05
                      DI,0007
076A:000D BF0700
                MOV
076A:0010 46
                INC
076A:0011 47
                INC
                      DI
076A:001Z FECB
                DEC
                      BL
076A:0014 75FA
                JNZ
                      0010
076A:0016 8A04
                MOV
                      AL,[SI]
076A:0018 8805
                MOV
                      [DI],AL
076A:001A 4E
                DEC
                      SI
                DEC
076A:001B 4F
                      DI
076A:001C 49
076A:001D 75F7
                      CX
                DEC
                JNZ
                      0016
076A:001F B8004C
                MOV
                      AX,4C00
-d 076C:0004
0760:0000
               55 56 57 58-59 5A 24 00 00 00 00 81
                                            UVWXYZ$.....
FF FF FF FF-FF FF
0760:0040
         FF FF FF
                              FF FF
076C:0060 FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
                                          . . . & . . . . . . . . . . . .
076C:0080 FF FF FF FF
```

After :-

```
076A:001F B8004C
          MOV
              AX,4C00
-d 076C:0004
    UUWXYZ$.....
0760:0000
0760:0010
0760:0020
    076C:0030
    076C:0040
076C:0050
076C:0060 FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF FF FF
076C:0080 FF FF FF FF
Program terminated normally
-d 076C:0004
0760:0000
          55 56 57 55-56 57 58 59 5A 00 00 81
                             UUWUWXYZ...
076C:0050
0760:0060
                           . . . & . . . . . . . . . . . . . . .
076C:0080 FF FF FF FF
```

```
10-> Program to interchange two blocks of data.
Code:-
model small
.8086
.data
s1 db "UVWXYZ$"
s2 db "123456$"
.code
mov ax, @data
mov ds, ax
mov si,offset s1
mov di, offset s2
mov cx,0006h
up: mov al,[si]
  mov bl,[di]
  mov [si],bl
  mov [di],al
  inc si
  inc di
  dec cx
  jnz up
mov ax, 4C00H
int 21h
end
```

Before:-

```
AX,076C
076A:0000 B86C07
                  MOV
076A:0003 8ED8
                 MOV
                        DS,AX
076A:0005 BE0000
                  MOV
                        SI,0000
076A:0008 BF0700
                 MOV
                        DI,0007
076A:000B B90600
                 MOV
                        CX,0006
076A:000E 8A04
                 MOV
                        AL, [SI]
                        BL,[DI]
076A:0010 8A1D
                 MOV
076A:0012 881C
                 MOV
                        [SI],BL
076A:0014 8805
                 MOV
                        [DII,AL
076A:0016 46
                  INC
                        SI
076A:0017 47
                  INC
                        DI
076A:0018 49
                  DEC
                        CX
076A:0019 75F3
                  JNZ
                        000E
076A:001B B8004C
                 MOU
                        AX,4C00
076A:001E CD21
                  INT
-d 076C:0000
076C:0000 55 56 57 58 59 5A 24 31-32 33 34 35 36 24 00 81
                                             UVWXYZ$123456$...
076C:0040
        0760:0050
          FF FF
        \mathbf{F}\mathbf{F}
        FF FF FF 26 00 FF FF FF-FF FF FF FF FF FF
0760:0060
                                         \mathbf{F}\mathbf{F}
                                              . . . & . . . . . . . . . . . .
```

After:-

AILCI.																
076A:0019	75F3	}			Ji	ΥZ		000E								
076A:001B	B800	4 C			M	JŲ		AX,4CC	90							
076A:001E	CD21				11	T		21								
-d 076C:0	000															
0760:0000	55	56	57	58	59	5A	24	31-32	33	34	35	36	24	00	81	UVWXYZ\$123456\$
076C:0010	ΘE	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	FF-FF	$\mathbf{F}\mathbf{F}$							
076C:0020	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	\mathbf{FF}	\mathbf{FF}	
076C:0030	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	
076C:0040	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	
076C:0050	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	
076C:0060	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	26	00	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	&
076C:0070	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF-FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	
-g																
Program t		iate	ed 1	nori	na l	ly										
-d 076C:0																
076C:0000		32	33	34	35	36	24	55-56	57	58	59	5A	24	∞	81	123456\$U\\XYZ\$
076C:0010	ΘE	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF	FF-FF	$\mathbf{F}\mathbf{F}$							
076C:0020		$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF-FF	$\mathbf{F}\mathbf{F}$							
076C:0030		$\mathbf{F}\mathbf{F}$	FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF	FF-FF	\mathbf{FF}	FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF	$\mathbf{F}\mathbf{F}$	
076C:0040		FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$		$\mathbf{F}\mathbf{F}$		FF-FF	$\mathbf{F}\mathbf{F}$	FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	FF	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	
076C:0050		$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$	$\mathbf{F}\mathbf{F}$		FF-FF	$\mathbf{F}\mathbf{F}$							
076C:0060		FF	FF	26	-				FF	FF	FF	$\mathbf{F}\mathbf{F}$	FF	$\mathbf{F}\mathbf{F}$	\mathbf{FF}	&
076C:0070	$\mathbf{F}\mathbf{F}$	FF-FF	$\mathbf{F}\mathbf{F}$													
_																