

C:\>DEBUG

-A

073F:0100 MOV AX,FFFF

073F:0103 JMP 136

073F:0105 MOV BX,8888

073F:0108

-A 136

073F:0136 MOV CX,1111

073F:0139

-U 100 107

073F:0100 B8FFFF MOV AX,FFFF

073F:0103 EB31 JMP 0136

073F:0105 BB8888 MOV BX,8888

-U 136 139

073F:0136 B91111 MOV CX,1111

073F:0139 0000 ADD [BX+SI],AL

-R IP

IP 0100

:100

-R

AX=0000 BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI PL NZ NA PO NC

073F:0100 B8FFFF MOV AX,FFFF

-T

AX=FFFF BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=073F IP=0103 NU UP EI PL NZ NA PO NC

073F:0103 EB31 JMP 0136

-T

AX=FFFF BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=073F IP=0136 NU UP EI PL NZ NA PO NC

073F:0136 B91111 MOV CX,1111

-T

AX=FFFF BX=0000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=073F IP=0139 NU UP EI PL NZ NA PO NC

073F:0139 0000 ADD [BX+SI],AL DS:0000=CD

-A 100

073F:0100 JMP 1000:136

073F:0105

-U 100 102

073F:0100 EA36010010 JMP 1000:0136

-R IP

IP 0139

:100

-R

AX=FFFF BX=0000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI PL NZ NA PO NC

073F:0100 EA36010010 JMP 1000:0136

-T

AX=FFFF BX=0000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000

DS=073F ES=073F SS=073F CS=1000 IP=0136 NU UP EI PL NZ NA PO NC

1000:0136 0000 ADD [BX+SI],AL DS:0000=CD

```

-A 100
1000:0100 MOV BX,1000
1000:0103 JMP BX
1000:0105
-A 1000
1000:1000 MOV BX,2000
1000:1003 JMP [BX]
1000:1005
-E 2000 0 30
-A 3000
1000:3000 MOV BX,4000
1000:3003 JMP FAR [BX]
1000:3005
-E 4000 0 60 0 50

```

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-R
AX=FFFF BX=0000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=0100 NU UP EI NG NZ AC PE CY
1000:0100 BB0010 MOV BX,1000
-T

```

```

AX=FFFF BX=1000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=0103 NU UP EI NG NZ AC PE CY
1000:0103 FFE3 JMP BX
-T

```

```

AX=FFFF BX=1000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=1000 NU UP EI NG NZ AC PE CY
1000:1000 BB0020 MOV BX,2000
-T

```

```

AX=FFFF BX=2000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=1003 NU UP EI NG NZ AC PE CY
1000:1003 FF27 JMP [BX] DS:2000=3000
-T

```

```

AX=FFFF BX=2000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=3000 NU UP EI NG NZ AC PE CY
1000:3000 BB0040 MOV BX,4000

```

```

AX=FFFF BX=1000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=1000 NU UP EI NG NZ AC PE CY
1000:1000 BB0020 MOV BX,2000
-T

```

```

AX=FFFF BX=2000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=1003 NU UP EI NG NZ AC PE CY
1000:1003 FF27 JMP [BX] DS:2000=3000
-T

```

```

AX=FFFF BX=2000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=3000 NU UP EI NG NZ AC PE CY
1000:3000 BB0040 MOV BX,4000
-T

```

```

AX=FFFF BX=4000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=1000 IP=3003 NU UP EI NG NZ AC PE CY
1000:3003 FF2F JMP FAR [BX] DS:4000=6000

```

-T

AX=FFFF BX=4000 CX=1111 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=5000 IP=6000 NU UP EI NG NZ AC PE CY
5000:6000 0000 ADD [BX+SI],AL DS:4000=00

-A 100

5000:0100 MOV DX,148
5000:0103 MOV AH,09
5000:0105 INT 21
5000:0107 MOV AH,01
5000:0109 INT 21
5000:010B PUSH AX
5000:010C MOV DX,15B
5000:010F MOV AH,09
5000:0111 INT 21
5000:0113 POP DX
5000:0114 MOV AH,02
5000:0116 INT 21
5000:0118 MOV DX,16C
5000:011B MOV AH,09
5000:011D INT 21
5000:011F MOV DX,200
5000:0122 MOV BX,DX
5000:0124 MOV [BX],BYTE PTR 8
5000:0127 MOV AH,0A
5000:0129 INT 21
5000:012B MOV BX,202
5000:012E MOV CL,[BX-1]
5000:0131 MOV CH,0

5000:0133 ADD BX,CX
5000:0135 MOV [BX],BYTE PTR 24
5000:0138 MOV DX,17E
5000:013B MOV AH,9
5000:013D INT 21
5000:013F MOV DX,202
5000:0142 MOV AH,9
5000:0144 INT 21
5000:0146 INT 20
5000:0148 DB "INPUT A CHARACTER:\$"
5000:015B DB D,A,"YOUR INPUT IS \$"
5000:016C DB D,A,"INPUT A STRING:\$"
5000:017E DB D,A,"THE STRING YOU INPUT IS \$"
5000:0199

-D 148 19F

5000:0140		49 4E 50 55 54 20 41 20	INPUT A
5000:0150	43 48 41 52 41 43 54 4F-52 3A 24 0D 0A 59 4F 55		CHARACTER:\$..YOU
5000:0160	52 20 49 4E 50 55 54 20-49 53 20 24 0D 0A 49 4E		R INPUT IS \$..IN
5000:0170	50 55 54 20 41 20 53 54-52 49 4E 47 3A 24 0D 0A		PUT A STRING:\$..
5000:0180	54 48 45 20 53 54 52 49-4E 47 20 59 4F 55 20 49		THE STRING YOU I
5000:0190	4E 50 55 54 20 49 53 20-24 00 00 00 00 00 00 00		NPUT IS \$.....

-R IP

IP 1005

:100

-R

AX=FFFF BX=4000 CX=1111 DX=5000 SP=00FD BP=0000 SI=0000 DI=0000
DS=5000 ES=073F SS=073F CS=5000 IP=0100 NU UP EI NG NZ AC PE CY
5000:0100 BA4801 MOV DX,0148

-A

```
073F:0100 MOV AL,40
073F:0102 MOV BL,F0
073F:0104 CMP BL,AL
073F:0106 JA 111
073F:0108 MOV DX,12B
073F:010B MOV AH,09
073F:010D INT 21
073F:010F JMP 118
073F:0111 MOV DX,11A
073F:0114 MOV AH,09
073F:0116 INT 21
073F:0118 INT 20
073F:011A DB,D,A,"BL IS BIGGER!$"
073F:012A DB,D,A,"BL IS SMALLER!$"
073F:013B
```

-R

```
AX=0000 BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI PL NZ NA PO NC
073F:0100 B040 MOV AL,40
```

-T

```
AX=0040 BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0102 NU UP EI PL NZ NA PO NC
073F:0102 B3F0 MOV BL,F0
```

-T

```
AX=0040 BX=00F0 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0104 NU UP EI PL NZ NA PO NC
073F:0104 38C3 CMP BL,AL
```

-T

```
AX=0040 BX=00F0 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0106 NU UP EI NG NZ NA PO NC
073F:0106 7709 JA 0111
```

-T

```
AX=0040 BX=00F0 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0111 NU UP EI NG NZ NA PO NC
073F:0111 BA1A01 MOV DX,011A
```

```
AX=0940 BX=00F0 CX=0000 DX=011A SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0116 NU UP EI NG NZ NA PO NC
073F:0116 CD21 INT 21
```

-P

```
BL IS BIGGER!
AX=0940 BX=00F0 CX=0000 DX=011A SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0118 NU UP EI NG NZ NA PO NC
073F:0118 CD20 INT 20
```

```

-A 100
073F:0100 MOV DX,125
073F:0103 MOV AH,09
073F:0105 INT 21
073F:0107 MOV AH,01
073F:0109 INT 21
073F:010B CMP AL,79
073F:010D JZ 11C
073F:010F SUB AL,6E
073F:0111 JZ 11C
073F:0113 MOV DX,140
073F:0116 MOV AH,09
073F:0118 INT 21
073F:011A JMP 100
073F:011C MOV DX,152
073F:011F MOV AH,09
073F:0121 INT 21
073F:0123 INT 20
073F:0125 DB D,A,"INPUT YOUR CHOICE(Y/N)? $"
073F:0140 DB D,A,"INVALID CHOICE!$"
073F:0152 DB D,A,"YOUR INPUT IS OK!$"
073F:0166

-D 125 16F
073F:0120          0D 0A 49-4E 50 55 54 20 59 4F 55          ..INPUT YOU
073F:0130 52 20 43 48 4F 49 43 45-28 59 2F 4E 29 3F 20 24  R CHOICE(Y/N)? $
073F:0140 0D 0A 49 4E 56 41 4C 49-44 20 43 48 4F 49 43 45  ..INVALID CHOICE
073F:0150 21 24 0D 0A 59 4F 55 52-20 49 4E 50 55 54 20 49  !$..YOUR INPUT I
073F:0160 53 20 4F 4B 21 24 00 00-00 00 00 00 00 00 00 00  S OK!$.
-R
AX=0000 BX=0000 CX=0000 DX=0000 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI PL NZ NA PO NC
073F:0100 BA2501          MOV     DX,0125
-G=100 10B

INPUT YOUR CHOICE(Y/N)? A
AX=0141 BX=0000 CX=0000 DX=0125 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=010B NU UP EI PL NZ NA PO NC
073F:010B 3C79          CMP     AL,79

-T

AX=0141 BX=0000 CX=0000 DX=0125 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=010D NU UP EI NG NZ AC PO CY
073F:010D 740D          JZ       011C
-T

AX=0141 BX=0000 CX=0000 DX=0125 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=010F NU UP EI NG NZ AC PO CY
073F:010F 2C6E          SUB     AL,6E
-T

AX=01D3 BX=0000 CX=0000 DX=0125 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0111 NU UP EI NG NZ AC PO CY
073F:0111 7409          JZ       011C
-T

AX=01D3 BX=0000 CX=0000 DX=0125 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0113 NU UP EI NG NZ AC PO CY
073F:0113 BA4001          MOV     DX,0140

```

-T

AX=01D3 BX=0000 CX=0000 DX=0140 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0116 NU UP EI NG NZ AC PO CY
073F:0116 B409 MOV AH,09

-T

AX=09D3 BX=0000 CX=0000 DX=0140 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0118 NU UP EI NG NZ AC PO CY
073F:0118 CD21 INT 21

-P

INVALID CHOICE!

AX=09D3 BX=0000 CX=0000 DX=0140 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=011A NU UP EI NG NZ AC PO CY
073F:011A EBE4 JMP 0100

-T

AX=09D3 BX=0000 CX=0000 DX=0140 SP=00FD BP=0000 SI=0000 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI NG NZ AC PO CY
073F:0100 BA2501 MOV DX,0125

073F:0100 MOV CX,5
073F:0103 MOV SI,150
073F:0106 XDR AX,AX
073F:0108 MOV BX,0A
073F:010B MUL BX
073F:010D AND DX,DX
073F:010F JNZ 120
073F:0111 MOV DL,[SI]
073F:0113 INC SI
073F:0114 SUB DX,30
073F:0117 ADD AX,DX
073F:0119 LOOP 10B
073F:011B MOV [158],AX
073F:011E JMP 127
073F:0120 MOV DX,140
073F:0123 MOV AH,9
073F:0125 INT 21
073F:0127 INT 20
073F:0129

-E 140 "OVERFLOW!\$"

-E 150 "26784"

-D 140 15F

073F:0140 4F 56 45 52 46 4C 4F 57-21 24 00 00 00 00 00 00 OVERFLOW!\$.
073F:0150 32 36 37 38 34 00 00 00-00 00 00 00 00 00 00 26784.

-G=100 117

AX=0000 BX=000A CX=0005 DX=0002 SP=00FD BP=0000 SI=0151 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0117 NU UP EI PL NZ NA PO NC
073F:0117 01D0 ADD AX,DX
-T

AX=0002 BX=000A CX=0005 DX=0002 SP=00FD BP=0000 SI=0151 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0119 NU UP EI PL NZ NA PO NC
073F:0119 E2F0 LOOP 010B
-T

AX=0002 BX=000A CX=0004 DX=0002 SP=00FD BP=0000 SI=0151 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=010B NU UP EI PL NZ NA PO NC
073F:010B F7E3 MUL BX

-G=100 127

AX=68A0 BX=000A CX=0000 DX=0004 SP=00FD BP=0000 SI=0155 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0127 NU UP EI PL NZ AC PE NC
073F:0127 CD20 INT 20
-D 140 15F
073F:0140 4F 56 45 52 46 4C 4F 57-21 24 00 00 00 00 00 00 OVERFLOW!\$.
073F:0150 32 36 37 38 34 00 00 00-A0 68 00 00 00 00 00 00 26784....h.....

-A 100

073F:0100 MOV DI,11C
073F:0103 MOV CX,3
073F:0106 MOV AL,42
073F:0108 CLD
073F:0109 REPNZ
073F:010A SCASB
073F:010B MOV BX,11C
073F:010E SUB DI,BX
073F:0110 MOV DI,11C
073F:0113 MOV CX,3
073F:0116 MOV AL,30
073F:0118 REPNZ
073F:0119 SCASB
073F:011A INT 20
073F:011C DB "ABC"
073F:011F

-R IP

IP 0127

:100

AX=68A0 BX=000A CX=0000 DX=0004 SP=00FD BP=0000 SI=0155 DI=0000
DS=073F ES=073F SS=073F CS=073F IP=0100 NU UP EI PL NZ AC PE NC
073F:0100 BF1C01 MDU DI,011C
-T
AX=68A0 BX=000A CX=0000 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0103 NU UP EI PL NZ AC PE NC
073F:0103 B90300 MDU CX,0003
-T
AX=68A0 BX=000A CX=0003 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0106 NU UP EI PL NZ AC PE NC
073F:0106 B042 MDU AL,42
-T
AX=6842 BX=000A CX=0003 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0108 NU UP EI PL NZ AC PE NC
073F:0108 FC CLD
-T
AX=6842 BX=000A CX=0003 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0109 NU UP EI PL NZ AC PE NC
073F:0109 F2 REPNZ
073F:010A AE SCASB
-T
AX=6842 BX=000A CX=0001 DX=0004 SP=00FD BP=0000 SI=0155 DI=011E
DS=073F ES=073F SS=073F CS=073F IP=010B NU UP EI PL ZR NA PE NC
073F:010B BB1C01 MDU BX,011C
-T
AX=6842 BX=011C CX=0001 DX=0004 SP=00FD BP=0000 SI=0155 DI=011E
DS=073F ES=073F SS=073F CS=073F IP=010E NU UP EI PL ZR NA PE NC
073F:010E 29DF SUB DI,BX
-T
AX=6842 BX=011C CX=0001 DX=0004 SP=00FD BP=0000 SI=0155 DI=0002
DS=073F ES=073F SS=073F CS=073F IP=0110 NU UP EI PL NZ NA PO NC
073F:0110 BF1C01 MDU DI,011C
-T
AX=6842 BX=011C CX=0001 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0113 NU UP EI PL NZ NA PO NC
073F:0113 B90300 MDU CX,0003
-T
AX=6842 BX=011C CX=0003 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0116 NU UP EI PL NZ NA PO NC
073F:0116 B030 MDU AL,30
-T
AX=6830 BX=011C CX=0003 DX=0004 SP=00FD BP=0000 SI=0155 DI=011C
DS=073F ES=073F SS=073F CS=073F IP=0118 NU UP EI PL NZ NA PO NC
073F:0118 F2 REPNZ
073F:0119 AE SCASB
-T
AX=6830 BX=011C CX=0000 DX=0004 SP=00FD BP=0000 SI=0155 DI=011F
DS=073F ES=073F SS=073F CS=073F IP=011A NU UP EI NG NZ AC PE CY
073F:011A CD20 INT Z0