

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 15

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
alpha    DWORD    1h, 2h
beta     DWORD    3h, 4h
gamma    DWORD    5

.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];          Indirect-displacement
    mov eax, 4[ebx][esi];     Base-Indirect-displacement
    mov eax, 8[ebx][esi];     Base-Indirect-displacement
    mov eax, 12[ebx][esi];    Base-Indirect-displacement

    exit
ENDP
```

100 %

Registers

EAX = 761A3388 EBX = 7EFDE000 ECX = 00000000 EDX = 00401005
ESI = 00000000 EDI = 00000000 EIP = 00401010 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 15	Asm
kernel32.dll!761a339a()	
[Frames below may be incorrect and/or missing, no symbols loaded for kernel32.dll]	
ntdll.dll!77659ef2()	
ntdll.dll!77659ec5()	

Ready

Ln 33 Col 9 Ch 9 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 16

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;  Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];     Indirect-offset
    mov ebx, OFFSET alpha;  Immediate
    mov eax, [ebx];         Indirect
    mov eax, 4[ebx];        Indirect-displacement
    mov eax, 4[ebx][esi];   Base-Indirect-displacement
    mov eax, 8[ebx][esi];   Base-Indirect-displacement
    mov eax, 12[ebx][esi];  Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 00000000 EDX = 00401005
ESI = 00000000 EDI = 00000000 EIP = 00401015 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 16	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 23 Col 41 Ch 30 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Debug Win32

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 17

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];     Indirect-offset
    mov ebx, OFFSET alpha;  Immediate
    mov eax, [ebx];         Indirect
    mov eax, 4[ebx];        Indirect-displacement
    mov eax, 4[ebx][esi];   Base-Indirect-displacement
    mov eax, 8[ebx][esi];   Base-Indirect-displacement
    mov eax, 12[ebx][esi];  Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 00000000 EDI = 00000000 EIP = 00401017 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 17	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 17 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 18

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];         Indirect-displacement
    mov eax, 4[ebx][esi];    Base-Indirect-displacement
    mov eax, 8[ebx][esi];    Base-Indirect-displacement
    mov eax, 12[ebx][esi];   Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 00000000 EDI = 00404008 EIP = 0040101C ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404010 = 00000005

Call Stack

Name	Lang
Project.exe!main() Line 18	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 18 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 19

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;  Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];         Indirect-displacement
    mov eax, 4[ebx][esi];    Base-Indirect-displacement
    mov eax, 8[ebx][esi];    Base-Indirect-displacement
    mov eax, 12[ebx][esi];   Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 00000000 EDI = 00404008 EIP = 00401021 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404010 = 0000000A

Call Stack

Name	Lang
Project.exe!main() Line 19	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 19 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Debug Win32

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 20

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;              Immediate
    mov eax, beta[esi];       Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];           Indirect
    mov eax, 4[ebx];          Indirect-displacement
    mov eax, 4[ebx][esi];     Base-Indirect-displacement
    mov eax, 8[ebx][esi];     Base-Indirect-displacement
    mov eax, 12[ebx][esi];    Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 0000000A EDI = 00404008 EIP = 00401027 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 20	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Solution... Class Vi... A... L... M... M... R... Pr... T... M... W... Call Stack Breakpoints Output

Ready Ln 20 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 21

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];         Indirect-displacement
    mov eax, 4[ebx][esi];    Base-Indirect-displacement
    mov eax, 8[ebx][esi];    Base-Indirect-displacement
    mov eax, 12[ebx][esi];   Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 0040102C ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

0040400C = 00000004

Call Stack

Name	Lang
Project.exe!main() Line 21	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 21 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 22

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];       Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];          Indirect-displacement
    mov eax, 4[ebx][esi];     Base-Indirect-displacement
    mov eax, 8[ebx][esi];     Base-Indirect-displacement
    mov eax, 12[ebx][esi];    Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000004 EBX = 7EFDE000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401032 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 22	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 22 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 23

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];     Indirect-offset
    mov ebx, OFFSET alpha;  Immediate
    mov eax, [ebx];         Indirect
    mov eax, 4[ebx];        Indirect-displacement
    mov eax, 4[ebx][esi];   Base-Indirect-displacement
    mov eax, 8[ebx][esi];   Base-Indirect-displacement
    mov eax, 12[ebx][esi];  Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000004 EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401037 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404000 = 00000001

Call Stack

Name	Lang
Project.exe!main() Line 23	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 23 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 24

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;              Immediate
    mov eax, beta[esi];       Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];           Indirect
    mov eax, 4[ebx];          Indirect-displacement
    mov eax, 4[ebx][esi];     Base-Indirect-displacement
    mov eax, 8[ebx][esi];     Base-Indirect-displacement
    mov eax, 12[ebx][esi];    Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000001 EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401039 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404004 = 00000002

Call Stack

Name	Lang
Project.exe!main() Line 24	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 24 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 25

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;        Indirect
    mov esi, [gamma];        Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;   Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];         Indirect-displacement
    mov eax, 4[ebx][esi];    Base-Indirect-displacement
    mov eax, 8[ebx][esi];    Base-Indirect-displacement
    mov eax, 12[ebx][esi];   Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000002 EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 0040103C ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404008 = 00000003

Call Stack

Name	Lang
Project.exe!main() Line 25	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 25 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 26

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;   Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];      Indirect-offset
    mov ebx, OFFSET alpha;  Immediate
    mov eax, [ebx];          Indirect
    mov eax, 4[ebx];         Indirect-displacement
    mov eax, 4[ebx][esi];    Base-Indirect-displacement
    mov eax, 8[ebx][esi];    Base-Indirect-displacement
    mov eax, 12[ebx][esi];   Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000003 EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401040 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

0040400C = 00000004

Call Stack

Name	Lang
Project.exe!main() Line 26	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 26 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 27

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;  Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];     Indirect-offset
    mov ebx, OFFSET alpha; Immediate
    mov eax, [ebx];         Indirect
    mov eax, 4[ebx];        Indirect-displacement
    mov eax, 4[ebx][esi];   Base-Indirect-displacement
    mov eax, 8[ebx][esi];   Base-Indirect-displacement
    mov eax, 12[ebx][esi];  Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 00000004 EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401044 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

00404010 = 0000000A

Call Stack

Name	Lang
Project.exe!main() Line 27	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Ready

Ln 27 Col 1 Ch 1 INS

Project (Debugging) - Microsoft Visual C++ 2010 Express (Administrator)

File Edit View Project Build Debug Tools Window Help

Debug Win32

Process: [3688] Project.exe Thread: [2756] Main Thread Stack Frame: Project.exe!main() Line 30

Solution Explorer

- Solution 'Project' (1 project)
- Project
 - External Dependencies
 - hw05_q2.asm

hw05_q2.asm

```
.code
main PROC
    mov eax, 0Ah;           Immediate
    mov ecx, eax;           register to register
    mov edi, OFFSET beta;  Immediate
    mov [gamma], eax;       Indirect
    mov esi, [gamma];       Direct
    mov esi, 4;             Immediate
    mov eax, beta[esi];     Indirect-offset
    mov ebx, OFFSET alpha; Immediate
    mov eax, [ebx];         Indirect
    mov eax, 4[ebx];        Indirect-displacement
    mov eax, 4[ebx][esi];   Base-Indirect-displacement
    mov eax, 8[ebx][esi];   Base-Indirect-displacement
    mov eax, 12[ebx][esi];  Base-Indirect-displacement

    exit
main ENDP

END main
```

100 %

Registers

EAX = 0000000A EBX = 00404000 ECX = 0000000A EDX = 00401005
ESI = 00000004 EDI = 00404008 EIP = 00401048 ESP = 0018FF8C
EBP = 0018FF94 EFL = 00000246

CS = 0023 DS = 002B ES = 002B SS = 002B FS = 0053 GS = 002B

OV = 0 UP = 0 EI = 1 PL = 0 ZR = 1 AC = 0 PE = 1 CY = 0

Call Stack

Name	Lang
Project.exe!main() Line 30	Asm
ntdll.dll!77659ef2()	
[Frames below may be incorrect and/or missing, no symbols loaded for ntdll.dll!77659ec5()]	
ntdll.dll!77659ec5()	

Solution... Class Vi... A... L... M... M... R... Pr... T... M... W... Call Stack Breakpoints Output

Ready Ln 30 Col 1 Ch 1 INS