

Part1:

The screenshot shows the Visual Studio IDE with the assembly file `setDifference.asm` open. The code defines two variables, `SetX` and `SetY`, and a `main` procedure that calculates their bit-wise difference and displays it using `WriteBin`. The Solution Explorer on the right shows the project structure. The Output window at the bottom displays the debug console output, including the bit string `0000 0000 0000 0000 0000 0000 0000 1010` and various system messages.

```
16 .data
17 SetX = 10001010b
18 SetY = 10000001b
19
20
21 .code
22 main PROC
23     mov eax, SetX    ; Stores a bit-mapped set of SetX
24     xor eax, SetY    ; Yields members different EACH OTHER
25     and eax, SetX    ; Filters only members SetX holds
26
27     call WriteBin    ; Displays the value in a bit string
28
```

Output:

```
0000 0000 0000 0000 0000 0000 0000 1010
C:\Users\knakata595\OneDrive - Contra Costa Community College District Employees\COMSC260\Project32_VS2022\Debug\Project32_VS2022.exe (process 1920) exited with code 0.
To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console when debugging stops.
Press any key to close this window . . .
```

Part2:

The screenshot shows the Visual Studio IDE with the assembly file `compoundConditionsAND.asm` open. The code defines a `main` procedure that compares two values, `val1` and `ecx`, and sets a flag `X` based on the result. The Watch window at the bottom shows the values of `val1`, `ecx`, and `edx` during execution.

```
24
25 .code
26 main PROC
27     mov ecx, 1211h
28     mov edx, 1111h
29
30     cmp val1, ecx    ; Compares val1 and ecx
31     jbe L1           ; Jumps to L1 if val1 <= ecx
32     cmp ecx, edx    ; Compares ecx and edx
33     jbe L1           ; Jumps to L1 if ecx <= edx
34     mov X, 1         ; X = 1 if (val1 > ecx) AND (ecx > edx)
35     jmp next         ; Want to skip L1
36
37 L1: mov X, 2         ; Else block
38
39 next:
40     call displayX
41     INVOKE ExitProcess, 0
```

Watch 1:

Variable	Value
X	1
val1	4626
ecx	4625
edx	4369