

## 102-A04 Comparing 4 Integers (again)

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### Work to do

We are going to re-work the program you wrote in 102-A03 to obtain the same result but differently. We now want you to write a program using nested conditional statements. The key is that instead of using a different printf to display the three comparison messages (cf. 102-A03), you will now have to display a unique message with a single printf. Of course, there will be many of those printf statements throughout the code each of them corresponding to one of the possibilities (e.g.  $A < B > C < D$ ).

### Example(s)

A = 20

B = 70

C = 8

D = 30

Here are the comparisons I can make;

A (20) is < than B (70) is > than C (8) is < than D (30)

### Hints

- The point of this exercise is for you to develop a consequent code using nested IF statements
- You will end up with quite a few printf in each THEN or ELSE branches of your IF statements but only 3 will get executed each time you run your code.
- Start by comparing, say,  $A < B$ . In the THEN branch you will know that A is < B and will then proceed to compare B and C. In the else branch you will know that  $A \geq B$  and proceed to compare B and C. The two branches will look the same from the structure point of view but the printf statements used will differ.

### Testing

Make sure your tests cover all possible **paths of execution** inside your code. How does this job differ from the one you had to do in 102-A03?

Input				Output	
A	B	C	D	Expected	Observed