## 102-A03 Comparing 4 integers

## Work to do

Write a program which prompts the user for 4 integers values to be stored in variables A , B , C and D. You will then display 3 messages on the screen (each by executing a printf statement) which will state the result of the comparison of the variables two by two.

## Example(s)

$\mathrm{A}=20$
$B=70$
$\mathrm{C}=8$
D = 30
Here are the comparisons I can make;
A (20) is < than B (70)
$\mathrm{B}(70)$ is $>$ than $\mathrm{C}(8)$
$\mathrm{C}(8)$ is $<$ than $\mathrm{D}(30)$

## Hints

- The point of this exercise is for you to develop a consequent code using serially arranged 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.


## Testing

Make sure your tests cover all possible paths of execution inside your code. In a program, like this one, where there are many THEN / ELSE branches, each run of the code will, depending on input value, only activate a few branches. Testing thoroughly your code means keeping track of which branches get executed for each test case. In addition to picking values which would make a bug apparent, you will therefore also have to make sure that your test-harness actually triggers all possible branches in your code. This is called code coverage by a test.

| Input |  |  | Output |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | B | C | D | Expected | Observed |
|  |  |  |  |  |  |

