

Task 1 - Scaffolded

Create a program in LMC which allows three numbers to be input and outputs each one in reverse order.

```
INP
STA _____
INP
STA _____
INP
OUT
LDA num2
_____
LDA num1
_____
HLT
num1 DAT
num2 DAT
```

Thinking Question: Why doesn't the third number need to be stored in memory using LDA num3?

Extension: Could you adapt the program so that the third number is saved in memory?

Task 2 – Guided

- Obtain the three inputs by using INP and then, after each input, store in a memory location using the instruction `STA num1`.
- The third number to be input will currently be in the accumulator. To add `num2` to this, simply use the instruction `ADD num2`.
- Repeat this addition for the `num1` operand.
- Output the result, which will be in the accumulator.
- Stop the program.