**Numerix**

To complete this challenge, I analyzed the binary. I managed to figure out that this program is one that asks the user what the programmer’s favourite numbers are. Then, the program gives the user feedback based on whether they are right. The programmer’s favourite numbers are hardcoded into the program, so I used Ghidra to translate the hex into decimal and found the programmer’s favourite numbers. For the last question, the favourite number needed to be a number such that number\_guessed & B == C, where B and C were given. Clearly, number\_guessed could just be set to C, and then if this statement could ever work, it would work. This is how I found all the answers for this challenge.