This zip contains 3 other files :

1. A file debug.s that has two useful functions.
    a. printReg - Prints the contents of any GPR using it's number eg
    printReg 0 prints value in x0
    printReg 1 prints value in x1 etc
    b. printStr - Prints a string to console, useful to print descriptive message eg
    printStr "Before MOVK"
    printReg 0
    // MOVK instruction that changes x0
    printStr "After MOVK"
    printReg 0

    The above is for explanation, you do not need to show prints before and after every instruction, rather just where the results are asked, but you may add anywhere else for your own debugging.

2. An example.s file that has an example of usage of both functions and how to include debug.s in your .s file.
3. A Makefile that works with these.

To build and run the example.s :
1. Put all three files - example.s, debug.s and Makefile in the same directory - cd into it.
2. make
3. qemu-aarch64 -L ~/aarch64-root ./example

If you choose to use this, then, for every program you will need to

1. Start your .s file, .include debug.s in your code file, write your code and print statements.
2. Update your Makefile - the only change being to "SOURCES = " - just add your new source(s), debug.s must not be added to SOURCES in Makefile. No other changes necessary.
3. Have Makefile and debug.s in the same directory as your code file
4. Make and emulate the same way

In this way, you do not need gdb to see/ screenshot register contents, you may still use it to single step for real debugging.

Using this is for your convenience. It is NOT mandatory to use. You are welcome to use gdb if you find that easier. In that case,you can just edit the Makefile that was originally provided with HelloWorld to replace HelloWorld with your file name everywhere and it should work.

I can help in case of any difficulties with flow.