COMP2611: Computer Organization

MIPS programming

- □ You will learn the following in this lab:
 - □ MIPS programming by practicing it in Mars.

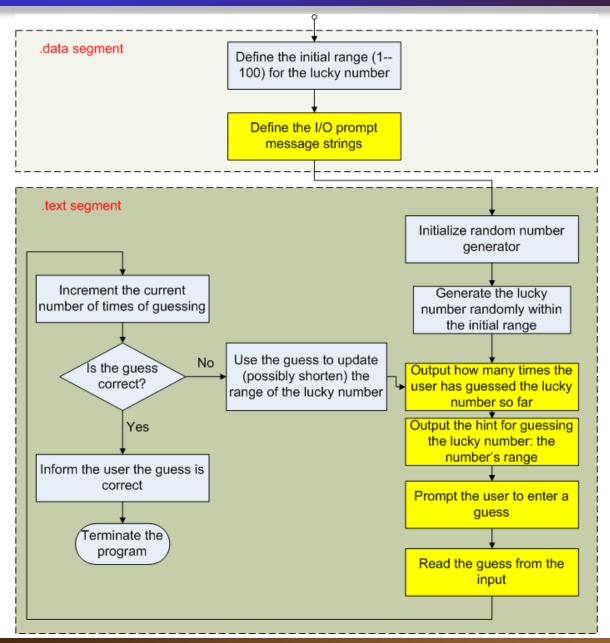
The number guessing game

- □ Complete the program code of <u>guessingGame.s</u> by following the comments on the code.
 - ☐ The program picks a lucky number randomly from the interval 1 to 100. It then prompts the user to guess the number by telling him/her this interval as a hint.
 - ☐ If the input guess is correct, the program tells the user and then terminates.
 - □ Otherwise, the user's guess will be used to update (shorten) the interval as the hint for the user's next guess (until a guess is correct).
 - ☐ The number of guesses the user has made so far should also be displayed (until a correct guess is made).
 - □ The program code for updating the number interval as the hint has already been completed. You just need to complete the other syscall-related codes (as suggested by the code comments), e.g., I/O syscalls.

The number guessing game

□ Follow the comments on the code to complete the program. The program tasks to be completed are also highlighted in yellow in the flow chart on the next page.

Program flow



- You have learnt:
 - □ MIPS programming for the number guessing game in MARS.