Using the debugger, answer the following questions. The order of the questions is important. The seed values are based on a sequence of dates (10/2/2015, 10/3/2015, etc.). Be sure to use the seed values given or your answers will differ greatly from the correct answers.

1. Run the program (single step) and enter a seed value of 1022015. After calling the shuffle() function, what is the value of array[8]?

358676568

1. Restart the program and run it with a seed value of 1032015. After calling the fill() function but before calling the shuffle() function, what is the value of array[13]?

348949621

1. After calling the shuffle() function, where has the value that was in array[13] been moved to? (Hint: You can print the contents of the entire array in the main() function by typing the gdb commandprint array.)

1158311429

1. Restart the program and run it with a seed value of 1042015. Step into the fill() function. Inside the loop, when i == 14, what is the value of index after assignment? (i.e., after executing the line index = rand() % size;)

3

1. Restart the program and run it with a seed value of 1052015. Step into the fill() function. Set a watchpoint on b[29] (you can use the gdb command watch to do this). Continue the execution of the program. When it stops, what is the value of b[29]? Continue the execution of the program. When it stops again, what is the value of b[29]? Delete the watchpoint using the delete command.

0

1. Restart the program and run it with a seed value of 1062015. After the call to fill() and before the call to shuffle() replace the value in array[26] with a -1. (Use the gdb command set variable to do this.) Verify that your change is in place. After calling shuffle() where is the -1?

-1, gdb says cannot access memory at 0xffffffffffffffff

1. Restart the program and run it with a seed value of 1072015. Step into the shuffle() function. What are the values computed for first - ar and second - ar when j == 7? (The values of first and second are addresses.)

12 and 15

1. Restart the program and run it with a seed value of 1082015. Step into the shuffle() function. Set a watch on ar[5]. Continue the execution. When the value in ar[5] changes, what is the value of j?