

## CS-141 Basic Looping Problems

The following are a list of loops that a programmer ought to be able to do without much effort:

1. Write a for-loop that prints the integers from a to b. Repeat using a while-loop instead of a for-loop.
2. Write a for-loop that prints every other integer from a to b. Repeat using a while-loop.
3. Write a for-loop that prints the integers from a to b backwards. Repeat using a while-loop.
4. Write a for-loop that sums the integers from a to b. Repeat using a while-loop.
5. Write a for-loop that computes the average of n random numbers. Repeat using a while-loop.
6. Write a while-loop that prompts the user for a sequence of numbers, stopping when the user enters a sentinel value.
7. Write a while-loop that prompts the user for a sequence of numbers and determines the maximum (or minimum) value that has been entered.
8. Write a while-loop that prompts the user for a sequence of numbers and determines how many of the numbers are in a specified range, e.g. between 10 and 100.
9. Write a while-loop that prompts a user for an answer (e.g. yes or no) and keeps repeating the prompt if the user doesn't enter one of the allowed options. Repeat using a do-while loop.
10. Write a for-loop that prompts the user for a word and counts the number of occurrences of a given letter.