

# CS143-Introduction to Problem Solving and Programming

## Strings

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1. Explain each of the following string functions and indicate the header file that includes them:
  - a. gets
  - b. puts
  - c. strcpy, strncpy
  - d. strcat, strncat
  - e. strcmp, strncmp
  - f. strchr
  - g. strstr
2. Write a program that inputs two strings that represent integers, converts the strings to integers, and prints their greatest common divisor.
3. Write a program that uses the function strncat to concatenate the specified number of characters from the second string to the first string.
4. Write a program to check whether one string is a substring of another, use strstr.
5. Use the string-comparison function and sorting techniques to alphabetize a list of strings.
6. Write a program that accepts two ASCII codes and prints all the characters between the two codes.
7. Write a program that accepts a series of strings and prints the ones that end in "top".
8. Write a program that counts the number of occurrences of a character c in a string str.
9. Write a program to reverse a string.
10. Write a program to check if a string is a palindrome.