Algorithm for the commercial calculating program
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Step 1 - Welcome the user
  1a. Output the welcome message: "Hi there, welcome to our program!"
  1b. Introduce the main purpose of the program by outputting "We're here to help you calculate how many commercials can fit in a show that is scheduled for a 60 minute time slot."

Step 2 - Get the length of the show
  2a. Ask for the length of the show that is being aired during the 60 minute time slot by prompting the user: "Please enter the length of the show in minutes (in the range of 0-60, including 0 and 60): ", store the answer in a variable;
  2b. Read in the answer. If the user entered something that is not in the range of 0-60 (inclusive), repeat Step 2; otherwise, continue to 2c.;
  2c. Echo the answer out: "The length of the show is xxx (answer from the user) minutes."

Step 3 - Calculate the length for commercials
  3a. Use the formula "length for commercials = 60 - length of the show" to calculate the length for commercials, store the answer in a variable;
  3b. Output the result: " This leaves xxx (length for commercials) minutes for commercials."

Step 4 - Get the length of the commercials that the user plans to air
  4a. Prompt the user for the length of the commercial that they want to air: "Please enter the length of the commercial that you want to air: ", store the answer in a variable;
  4b. Read in the answer;
  4c. Test the value of the answer:
    c.i. If the value is less than or equal to the "length left over for commercials", increment the number for the amount of commercials and continue to 4d.;
    c.ii. If the value is more than the "length left over for commercials", output the message: "We are out of time and it can't be used." Then repeat Step 4;

c.iii. If the value is zero, then skip to Step 5.

4d. Calculate how many minutes are left after the user enter the length of the commercial that they plan to air, inform the user how much time is left by outputting: "There are xxx minutes left for commercials."

4e. Check if there is still time left for commercials, if there is still time left, repeat Step 4; if not, skip to Step 6.

Step 5 - Check if there is time left over for filler commercials

5a. Calculate how many minutes are left over, if there is still time left over, then inform the user by outputting the message: "There is still time left over, filler commercials (such as previews) will be needed, and the length needed for those fillers should be xxx minutes."

5b. If there is no time left over, continue to Step 6.

Step 6 - Tell the user the amount of commercials that can fit in the show

6a. Output the message: "There are xxx(how many) commercials that can fit in the show. And the length needed for filler commercials should be xxx minutes."

Step 7 - Terminate/End the program

7a. Ask if the user wants to start the program again by prompting the user for an answer: "Do you want to calculate again? ("Y" for "yes; "N" for "no"), please enter your answer: "

7b. Read in the answer and decide the outcome

b.i. If the answer is neither "Y" or "N", repeat Step 7.

b.ii. If the answer is "Y", then repeat Step 2;

b.iii. If the answer is "N", then terminate the program and output the message: "Thank you for using our program, have a wonderful day!"