CIS 22B Lab 1

Topics: new, delete, string class

For all assignments in CIS 22B, provide a heading comment at the top using the following format:

/\*

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Lab 1

Problem 0.0.0

Description of problem:

a few lines describing input, activity, and output of the program

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Each function except main should have a function header similar to this

example:

/\* \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\* getSize \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

asks user for size

size saved in calling function via reference parameter

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Problem1.1

Write a program containing the following functions:

main - calls the other functions; otherwise does nothing

getSize - which asks the user how many strings they want

getSpace - which gets an array in the heap of the size requested by the user

inputData - which allows the user to input the strings and stores them

in the array

printData - which prints all the strings, one string per line

destroy - which returns all the space to the heap

All of these functions, except main, shall have a return type of void.

Put the main function first.

Use the function names specified above.

Arrange the functions in the order listed above.

Problem 1.2

Write one program containing all these string exercises.

Exercise 1.2.1

Read a string from the user into a string named string1.

Test it with the data: Good morning

Print the following heading and the data contained in string1:

Exercise 1

Good morning

Exercise 1.2.2

Create a new string named string2 containing the contents from string1.

Append the following text to the end of string 2.

sleepy heads

(Note that there is a space before sleepy.)

Print the following heading and the data contained in string2:

Exercise 2

Good morning sleepy heads

Exercise 1.2.3

Create string3 with an initial value of:

bellow cello fellow hello mellow Novello Othello pillow Rollo solo yellow

Find the location of the first h in string3

Print the following heading and the location found in string3:

Exercise 3

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Exercise 1.2.4

Create an empty string named string4.

Copy string3 into string4.

Using the location found in exercise 3,

change the first h into J

Print the following heading and the data contained in string4:

Exercise 4

bellow cello fellow Jello mellow Novello Othello pillow Rollo solo yellow

Exercise 1.2.5

Create a copy of string3 named string5.

Use the find\_last\_of member function to find the position of the last l

Print the following heading and the position of the last l

Exercise 5

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Exercise 1.2.6

Create a new string named string6 containing the contents from string3.

Using the position of the last l found in exercise 5, erase all

characters from string6 following the last l

Print the following heading and the data contained in string6:

Exercise 6

bellow cello fellow hello mellow Novello Othello pillow Rollo solo yell