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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Spring 1984

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 is saved in calling function via reference parameter

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Problem1.1

Write **one** 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 puts an array on 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

The first h is at column *(put the column number here)*

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 a 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 y

Print the following heading and the position of the last y

Exercise 5

*(put the column number of the last y here)*

Exercise 1.2.6

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

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

characters from string6 **following** the last y

Print the following heading and the data contained in string6:

Exercise 6

bellow cello fellow hello mellow Novello Othello pillow Rollo solo y