

Function Practice Code

Code 1: Write a program that prompts a user to enter a string, and then shows a user a menu with options for operations on the string. The options include

- a. Capital all letters
- b. Count number of letters (excluding special symbols and numbers)
- c. Lowercase all letters
- d. Replace string

Use a single function to implement any option a user selects. The input parameters are a variable to denote what option a user selects and the string typed by a user. There is no return type, and the function will print the result to the console window. Example console window output is shown below.

```
Enter a string:Happy
Select option.
a.Capital all letters
b.Count letters
c.lowercase all
d.replace string
a
Modified string is HAPPY
```

```
Enter a string:Do3NotP833
Select option.
a.Capital all letters
b.Count letters
c.lowercase all
d.replace string
b
Number of letters is 5
```

```
Enter a string:DOSTUFF!
Select option.
a.Capital all letters
b.Count letters
c.lowercase all
d.replace string
c
Modified string is dostuff!
```

```
Enter a string:M0unt3D3W
Select option.
a.Capital all letters
b.Count letters
c.lowercase all
d.replace string
d
New String Value:F8ST!
Replaced old string with F8ST!
```

Code 2: Write a program that prompts a user to enter a radius, and then asks to calculate the volume of a sphere or area of a circle. Use functions to implement the following:

- Prompt user to enter radius – Has a return type of float for the radius and no input parameters
- Calculate volume or area – Has a return type of float for the volume. Input parameters are the radius and a variable denoting to calculate volume of sphere or area of circle.

Functions can pass inputs of your choosing (by value or by reference). Example console window output is shown below.

```
Enter a radius value: 5
1. Area of Circle
2. Volume of sphere
1
The area of the circle is 78.5.
```

```
Enter a radius value: 5
1. Area of Circle
2. Volume of sphere
2
The volume of the sphere is 523.3.
```