

## COMP500 / ENSE501: Week 11 – Exercise:

### EXERCISE NAME: *BSearch chars*

Write a program that asks the user to input a piece of text. The program must then sort the array of characters input using `qsort`. Next, the program must ask the user for a character. Based upon the character input by the user, the program must search the sorted text array to find whether the character is present using `bsearch`.

An example of program's output is as follows:

```
> apple
Search key? l
'l' found at 0014FDE2 (1)
```

Another example of program's output is as follows:

```
> apple
Search key? x
'x' not found!
```

Another example of program's output is as follows:

```
> Hello COMP500/ENSE501 students!!!
Search key? z
'z' not found!
```

Another example of program's output is as follows:

```
> Hello COMP500/ENSE501 students!!!
Search key? 0
'0' found at 003AF8DF (0)
```

Another example of program's output is as follows:

```
> pneumonoultramicroscopicsilicovolcanoconiosis
Search key? e
'e' found at 003AF758 (e)
```

Remember that the addresses will change each time the program is executed!

Ensure the program output is exactly as described, and that the whitespace of your source code is well formatted.