Assignment Week 11
CT103
C Programming

<u>Submission:</u>

REMEMBER: All files MUST be submitted

<u>before</u> you leave the lab *(even if you don't get it working!)*

You <u>must</u> be marked present by the lab tutor, and they <u>must</u> see your finished program before you leave

USE CORRECT FILE NAME AS PER INSTRUCTIONS

The tutors are there to help you - don't hesitate to ask for help

Assignment

- *This week is the first assignment with pointers, so you are asked to write 4 functions, in increasing order of difficulty (see sample output on following pages). You are provided with the function prototypes and main – you just have to write the functions* ☺
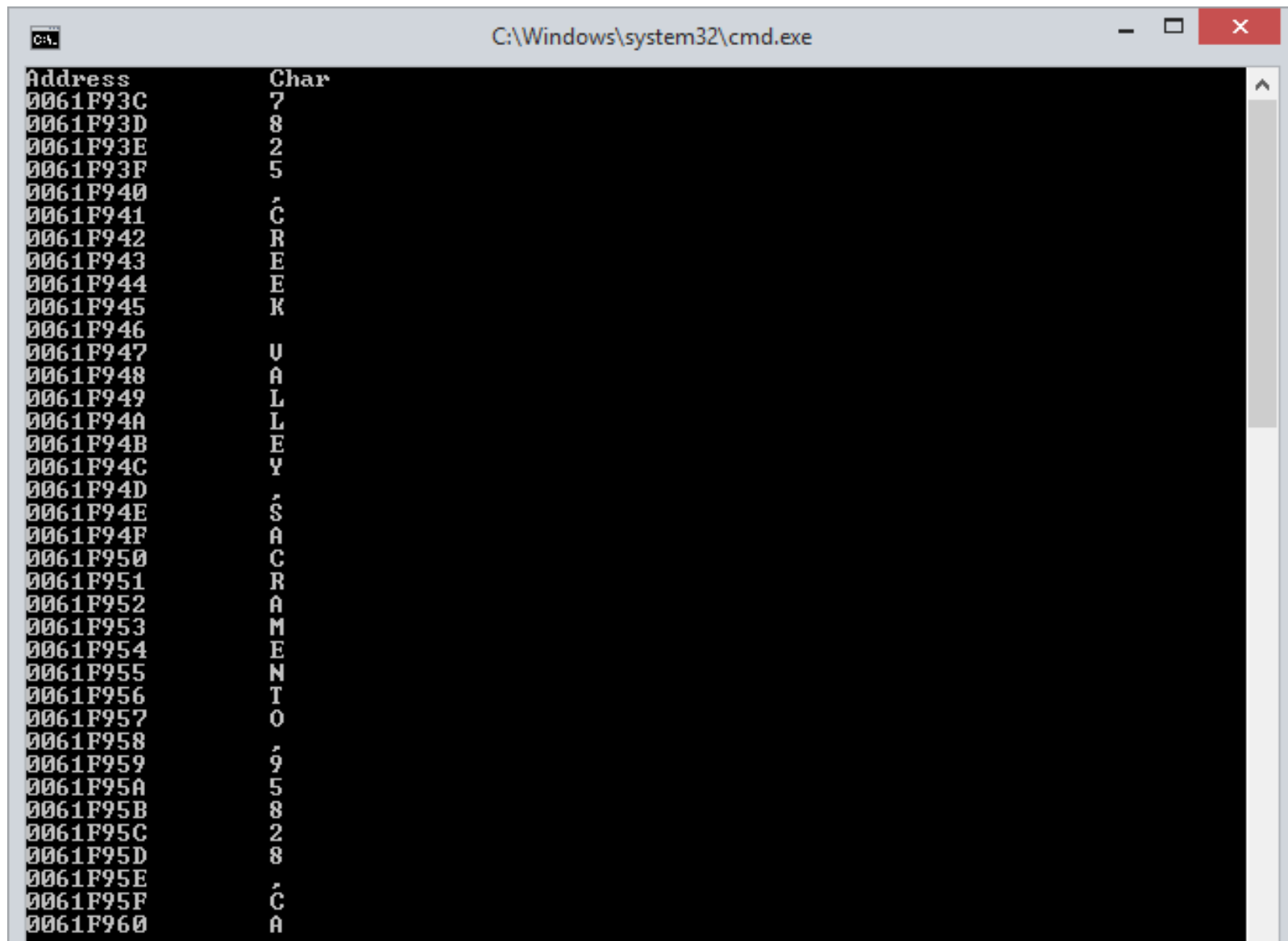
```
// 1st function to do  - this prints out the address and content of each
character in the input string
void charAddresses(char *string);

// 2nd function to do – this replaces all the commas in the input string with
spaces
void commaToSpace(char *str);

//3rd function to do – this prints out characters (starting at the address
provided by the input variable start) until a space is reached
void printWord(char *start);

// 4th function to do – most difficult
// starting from the first character in the input string, each call to
"nextWord" should return the next word in the string
// e.g. if the input string is "Hi there everyone" :
// first call to nextWord should return the address of the letter 't' of
"there"
// second call to nextWord should return the address of the first letter 'e'of
"everyone"
// third call to nextWord should return NULL
char *nextWord(char *start);
```

Sample Output:


```
C:\Windows\system32\cmd.exe

Address         Char
0061F93C        7
0061F93D        8
0061F93E        2
0061F93F        5
0061F940
0061F941        Č
0061F942        R
0061F943        E
0061F944        E
0061F945        K
0061F946
0061F947        V
0061F948        A
0061F949        L
0061F94A        L
0061F94B        E
0061F94C        Y
0061F94D
0061F94E        Š
0061F94F        A
0061F950        C
0061F951        R
0061F952        A
0061F953        M
0061F954        E
0061F955        N
0061F956        T
0061F957        O
0061F958
0061F959        9
0061F95A        5
0061F95B        8
0061F95C        2
0061F95D        8
0061F95E
0061F95F        Č
0061F960        A
```

Sample Output:

```
Without commas:
7825 CREEK VALLEY SACRAMENTO 95828 CA

First Word
7825
Second Word
CREEK
Third Word
VALLEY

7825

CREEK

VALLEY

SACRAMENTO

95828

CA

Press any key to continue . . .
```