

Question 1: String Tokenization (25 points)

A delimiter is a character that separates one word from another. Normally we use space as a separator in our sentences but let's play with the rules! Write a C function that takes a sentence and a delimiter as input and tokenizes the sentence into individual words. The function takes a 2D array and places individual words on separate indexes.

Note: Assume the length of words in Input Sentence isn't greater than 10 and the number of words in a sentence isn't greater than 5.

```
PS F:\Sadia Umar BS CS\PF Sir Anzar\Assignment 2> cd "f:\Sad
Enter sentence: My name is Sadia Umar
Enter delimiter:
Sentence: My name is Sadia Umar
Delimiter: ' '
Tokenized Words for Sentence
My      at index [0]
name    at index [1]
is      at index [2]
Sadia   at index [3]
Umar    at index [4]
PS F:\Sadia Umar BS CS\PF Sir Anzar\Assignment 2> cd "f:\Sad
Enter sentence: /'{/??}{//}?[++]?
Enter delimiter: ?
Sentence: /'{/??}{//}?[++]?
Delimiter: '?'
Tokenized Words for Sentence
/'{/  at index [0]
}      at index [1]
{/}    at index [2]
[++]   at index [3]
PS F:\Sadia Umar BS CS\PF Sir Anzar\Assignment 2> cd "f:\Sad
Enter sentence: From IT22.
Enter delimiter: .
Sentence: From IT22.
Delimiter: '.'
Tokenized Words for Sentence
From IT22      at index [0]
PS F:\Sadia Umar BS CS\PF Sir Anzar\Assignment 2> |
```

*Note that I am not displaying the empty words

Function Prototypes:

```
void takeSentence(char sentence[],int size);
char takeDelimiter();
void printSentence(char sentence[]);
void printDelimiter(char delimiter);
void tokenizeSentence(char sentence[], char delimiter,int r, int c,char tokens[][c]);
void printTokens(int r, int c,char tokens[][c]);
```