

University of Massachusetts Dartmouth
Department of Electrical and Computer Engineering

ECE 161
Lab 1

Name: score.cpp
Due: see <http://ece161.viall.org>

The game of Scrabble involves building words in order to get the maximum number of points. Each letter of the alphabet has a specific point value as follows:

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z
1	3	3	2	1	4	2	4	1	8	5	1	3	1	1	3	10	1	1	1	1	4	4	8	4	10

Write a function called "score". The function should take a character string as the sole argument. The string may be uppercase, lowercase, or a combination. The function should return the score that the word has. Any non-alphabetic character has a point value of zero.

Below is the main program you must use. You need to add `score()`.

```
#define _CRT_SECURE_NO_WARNINGS
#include <stdio.h>
#include <string.h>
#include <ctype.h>

int score(char s[]);

void main()
{
    char w[100];
    int x;
    printf("Word: ");
    gets(w);
    while (strcmp(w, "*"))
    {
        x=score(w);
        printf("Score is: %d\n",x);
        printf("Word: ");
        gets(w);
    }
}
```

Some examples:

```
Word: startrek
Score is: 12
Word: TORCHWOOD
Score is: 18
Word: bEdQuIlT
Score is: 20
Word: viii+ix=xvii
Score is: 30
Word: wow
Score is: 9
Word: *
Press any key to continue . . .
```