

Name: _____ CM: _____ Sect: _____ Grade: _____ of 10

This quiz is due after you have finished watching the **ReadScores**, **ArraysAndPointers**, **CharConcepts**, **CountingChars**, **StringConcepts**, and **StringLength** videos. Feel free to complete the quiz as you watch.

Video: ArraysAndPointers

1. (1) Given the code:

```
int b[]={4, 3, 1, 7, 8, 9, 0, 2, 6}; // 9 elements
int* p = b;
```

Write an expression using p that is equivalent to b[6]:

Write an expression using b, but without square brackets, that is equivalent to b[6]:

Video: CharConcepts

2. (1/2) **True** or **False** (circle one), the char type in C is really just a single-byte number.
3. (1/2) What function do we use in C to write one character to the console?
4. (1) Write a `for` loop that prints the characters from 'a' to 'z'.

Video: CountingChars

5. (1/2) What function do we use in C to get one character from the console?
6. (1) Which function found in `ctype.h`...
- a. Converts a character to upper case? _____
 - b. Checks to see if a character is a digit? _____
 - c. Checks to see if a character is a letter? _____
 - d. Checks to see if a character is a lowercase letter? _____

Video: String Concepts

7. (1) Complete the code below so it declares a character array called **computer** and initializes it with the string "Amiga":

```
_____ = "Amiga";
```

8. (1) Draw the box-and-pointer diagram for the declaration and initialization of the string constant in the previous question.

9. (1) Why do strings in C end with a '\0' character?

10. (2) In C, the `strcpy()` function is used to copy the contents of one string into another, while the `strcat()` function is used to add one string onto the end of another. In each case, we need to make sure the destination string is long enough to store the result. Finish the following code so that it concatenates `s1` and `s2`, then prints the last line of the Rose-Hulman fight song.

```
char s1[] = "Go, Red! Go White! "; /* 19 characters long */  
char s2[] = "Go Rose, Fight!"; /* 15 characters long */
```

```
printf("%s\n", s3);
```

11. (1/2) After watching this set of videos, what questions, if any, do you have? If none, please write "None".