

EECE.2160: ECE Application Programming

Fall 2017

Lecture 22: Key Questions

October 30, 2017

1. (Review) Explain the details of how arrays are passed to functions, and the relationship between arrays and pointers.
2. Describe how character arrays can be used to represent strings in C, as well as the string library functions frequently used to work with strings.

2 (continued). Describe how character arrays can be used to represent strings in C, as well as the string library functions frequently used to work with strings.

3. **Example:** What does the following program print?

```
int main() {
    char s1[15];
    int n1;
    char s2[10] = ".216";
    int n;

    strncpy(s1, "16", 15);
    n1 = strlen(s1);
    printf("s1 = %s\n", s1);
    printf("Length of s1 = %d\n\n", n1);

    printf("%c\n\n", s1[1]);

    strncat(s1, s2, 10);
    n1 = strlen(s1);
    printf("s1 = %s\n", s1);
    printf("Length of s1 = %d\n\n", n1);

    // Assume user inputs: ABC ABD
    printf("Enter two strings:");
    scanf("%s%s", s1, s2);
    n = strncmp(s1, s2, 15);
    if (n > 0)
        printf("%s > %s\n", s1, s2);
    else if (n < 0)
        printf("%s < %s\n", s1, s2);
    else
        printf("%s == %s\n", s1, s2);
    return 0;
}
```