EECE.2160: ECE Application Programming

Fall 2016

Lecture 23: Key Questions October 31, 2016

1. 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. **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;
}
```