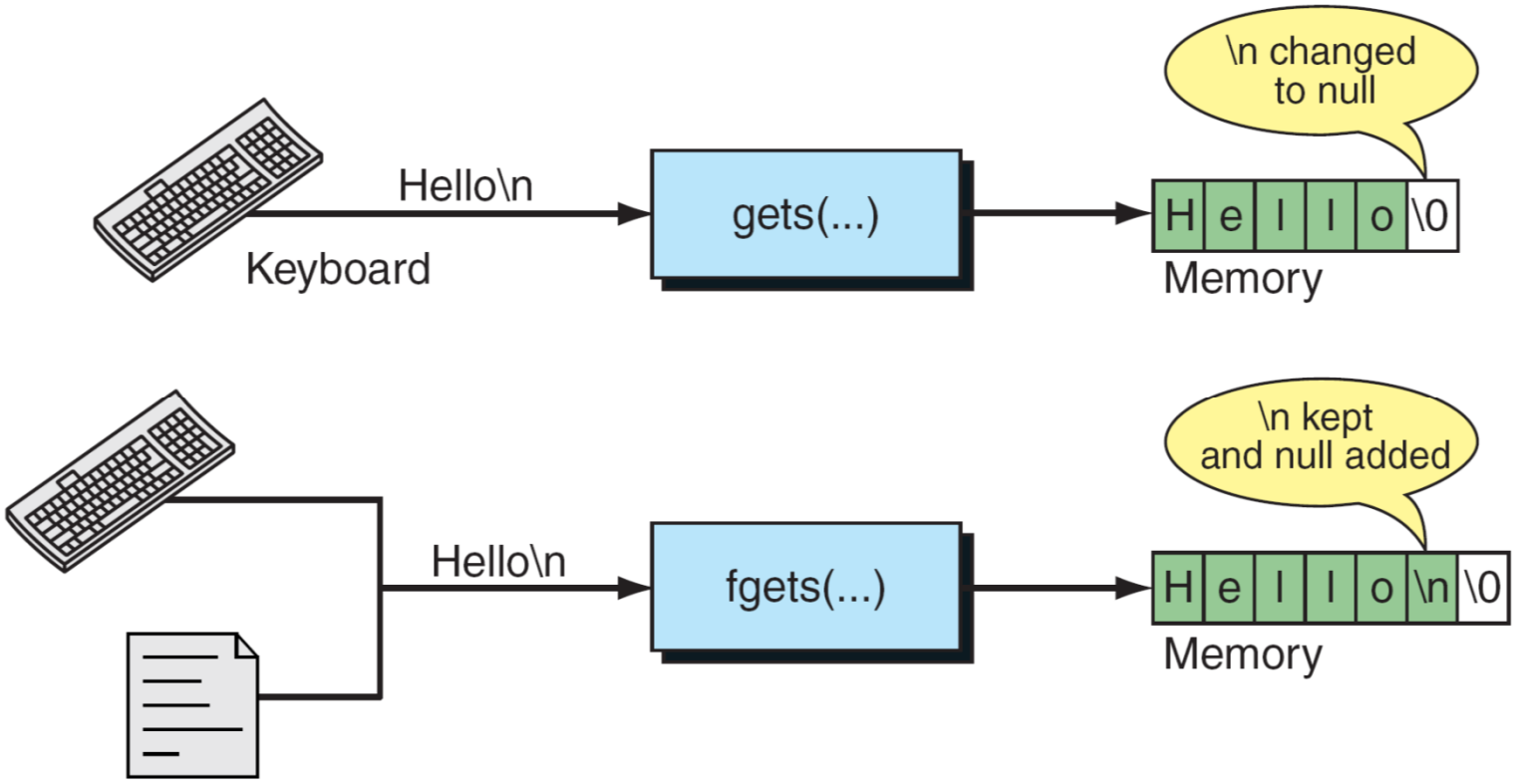
Strings & Character Arrays
Part - 2

gets() & fgets()



from Figure 11-11 in* Forouzan & Gilberg, *p. 682

Determining String Length

- We can use the **`strlen()`** (from **`string.h`**) function to determine the length of a string.
- It counts the number of characters in a string, excluding the null character.
- To use **`strlen()`**:

```
strCnt = strlen(myString);
```

Copying Strings

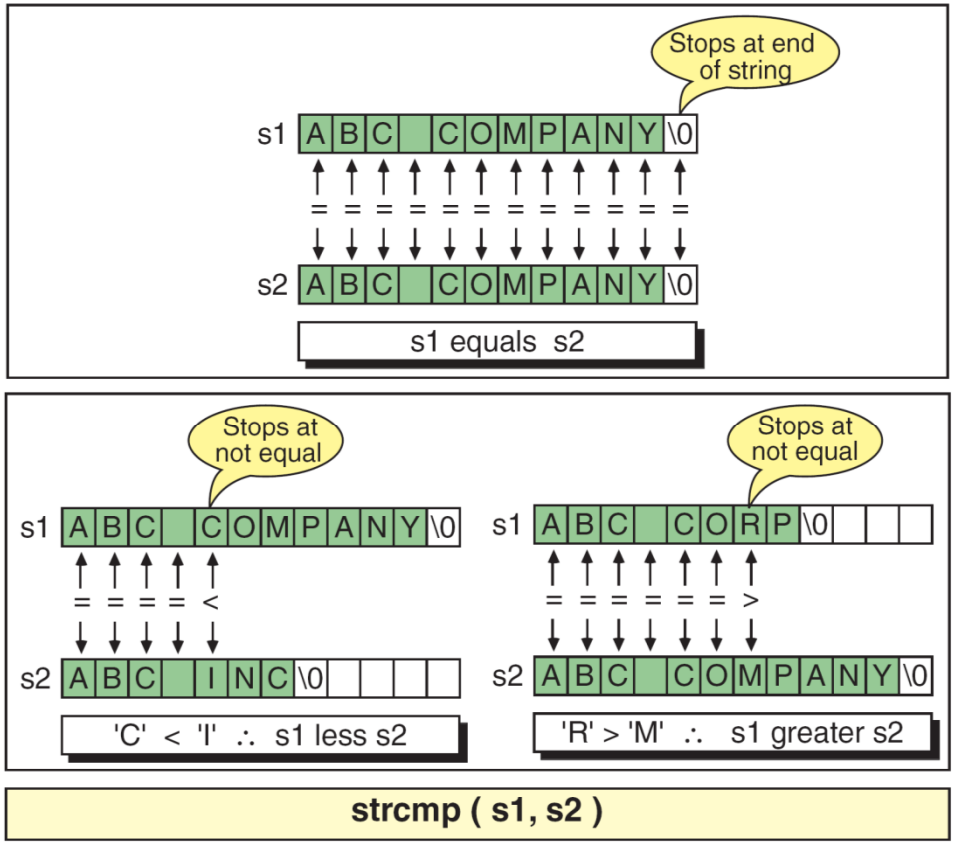
- Remember, we cannot simply assign one string to another due to the that strings are character arrays!
- However, we can use the **`strcpy()`** function from **`string.h`** to copy one string to another:

```
strcpy(destinationStr, sourceStr);
```

Comparing Strings

- We can use the **`strcmp()`** function, from **`string.h`**, to compare two strings: **`strcmp(str1, str2) …`**
- If the two strings are equal, **`strcmp()`** returns **`0`**.
- If **`str1`** is greater than **`str2`**, **`strcmp()`** returns a positive number.
- If **`str1`** is less than **`str2`**, **`strcmp()`** returns a negative number.

Comparing Strings



from Figure 11-17 in* Forouzan & Gilberg, *p. 698

Combining Strings

- We can use the **`strcat()`** function to combine two strings into a new string.
- We need to be certain that the array to which we assign the resulting string is large enough to hold all the characters from the two contributing strings.
- To use **`strcat()`**:
  `strcat(str1, str2);`
- The above example adds the value of **`str2`** to the end of **`str1`**, replacing the delimiter of **`str1`**.

Other Built-in Functions

- memchr();
- memcmp();
- memcpy();
- memmove();
- memset();

strcat();

strncat();

strchr();

strcmp();

strncmp();

Other Built-in Functions

- strcoll();
- strcpy();
- strncpy();
- strcspn();
- strerror();
- strxfrm();
- strlen();
- strpbrk();
- strrchr();
- strspn();
- strstr();
- strtok();

Questions?