String Library

Further string functions are available in the string library. But beware! If the array you are copying to is not big enough, then crash: the null-character terminator gets lost. These functions include:

- `strcpy(dest,src)` copies one string into another
- `strcat(dest,src)` appends one string to another
- `strlen(s)` returns the string length
- `strcmp(first,second)` compares the strings alphabetically: it returns a negative value if the first comes before the second, 0 if the two strings are the same, and a positive value if the first comes after the second.

The only one you have to know is `strlen`.

1 Example Program: stringLibrary.c

```c
#include <stdio.h>
#include <string.h>

int main(void) {

    char alpha[] = "alpha";
    char beta[] = "beta";
    char final[100];

    strcpy(final, alpha);
    if( strcmp(final,alpha)==0 ) // true
        printf("%s and %s are the same\n", final, alpha );

    strcat(final,beta); // final is now "alphabeta"
    if( strcmp(final,alpha)>0 ) // true
        printf("%s comes after %s\n", final, alpha );

    return 0;
}
```